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BARRIERS TO INCREASING NURSING JOB SATISFACTION IN EMERGENCY DEPARTMENTS

BY

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Approval of Thesis

The undersigned certify that they have read the thesis entitled

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Submitted by

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Abstract

Increasing volumes of patients, violence against healthcare providers, and budgetary constraints are making it progressively difficult for emergency departments (EDs) to retain emergency nursing personnel and to provide patients with safe and effective emergency care. Influencing job satisfaction of ED nurses can increase staff retention and patient safety, but existing literature lacks research on how to get job satisfaction interventions implemented into practice. This thesis provides a practical synthesis of workplace factors affecting job satisfaction of ED nurses, and identifies the practical barriers nursing leaders face when implementing job satisfaction interventions. Results provide evidence of levels of job satisfaction measurement and job satisfaction interventions in the ED, recognize gaps in our knowledge, and identify which stakeholders need to take action in order to make real changes in ED environments to benefit patients, nurses, leaders, and the healthcare system as a whole.

Keywords: leadership, healthcare management, emergency nursing, emergency department, work satisfaction, patient safety, implementation research, pragmatism, practical research, Mazlow, Herzberg

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Chapter 1. Introduction

Background

In a time of increasing constraints to the Canadian healthcare system (Canadian Institute for Health Information [CIHI], 2017a; CIHI, 2017b; Jacobson Consulting 2017; RiskAnalytica, 2013), it is vital that current, relevant, and practical nursing research is conducted in order to increase the functioning of emergency departments (ED). Current literature shows that increasing job satisfaction of nursing staff can increase patient safety and improve quality of care provided (Adriaenssens, De Gucht, & Maes, 2015b; Aiken et al., 2012; Ball et al., 2017; Biegger, De Geest, Schubert, & Ausserhofer, 2016; Hayes, Bonner, & Pryor, 2010; Lu, Zhao, & While, 2019; O'Mahony, 2011; Orgambídez-Ramos & De Almeida, 2017; Roulin, Mayor, & Bangerter, 2014; Strömgren, Eriksson, Bergman, & Dellve, 2016; Suárez, Asenjo, & Sánchez, 2017; Tarcan et al., 2017). Increasing job satisfaction can affect mental and physical health of nursing staff (Stathopolou, Karanikola, Panagiotopoulou, & Papathanassoglou, 2011; Strömgren et al., 2016; Yuwanich, Sandmark, & Akhavan, 2016), can affect nursing staff turnover (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Lu et al., 2019), and can affect nurses intent to leave (De Simone, Planta, & Cicotto, 2018; Kamal, 2011; Roulin et al., 2014). Job satisfaction of nursing staff is especially vital in the chaotic and unpredictable ED environment (Adriaenssens, De Gucht, & Maes, 2015a), yet there exists very little evidence regarding the aspects of job satisfaction that affect ED nurses specifically. There exists even less information regarding the implementation of interventions that improve job satisfaction of ED nurses, and these are the gaps intended to be filled by this research.

Research Question

What factors influence the job satisfaction of emergency nurses, what are the practical barriers that prevent increasing job satisfaction of emergency nurses, and what action should be taken to overcome these barriers.

Definition of Job Satisfaction

Castaneda and Scanlan (2014) define job satisfaction as a reaction to a job that comes from comparing actual outcomes (the reality of the job) with outcomes that are desired, expected, and deserved (the belief of what the job should be). Other definitions commonly used in job satisfaction research describe an emotion or attitude of feeling fulfilled in ones' job and thus satisfied (Holmberg, Caro, & Sobis, 2018; Suárez, Asenjo, & Sánchez, 2017; Tarcan, Neset, Schooley, Top & Yorgancioglu, 2017). Although these definitions describe job satisfaction simply, it is evident from these definitions that job satisfaction is a multidimensional and subjective concept that cannot be easily measured or manipulated (Tarcan et al., 2017). For the purpose of this research, the general definition of feeling fulfilled in one's job was used to define job satisfaction, as it adequately encompasses the sentiment that job satisfaction is subjective to the person describing it.

Purpose and Significance

It will be demonstrated in the manuscripts that follow that problems associated with patient safety, staff turnover and health of ED nurses are widespread, and that research into this issue has the potential to impact not only Canadian EDs but the international emergency nursing community as well. The practical assessment of this highly researchable topic will provide a greater understanding regarding the use, or lack of use, of the job satisfaction metric in the ED. The identification of facilitators to improve the implementation of job satisfaction interventions

will generate new knowledge in hopes of increasing our ability to implement interventions that aim to increase job satisfaction. The results from this research will also help to identify the similarities and differences of perceived barriers that prevent the benefits of high nursing job satisfaction from reaching Canadian EDs. This study aims to inform our understanding of what needs to be done in order to facilitate the use of this cost-effective metric in the ED in order to ensure we maximize its potential benefit to patients, nurses, managers and organizations within our healthcare system.

Increasing nursing job satisfaction has implications not just for nurses but for all stakeholders involved including patients, nurses, managers, and the organization. Figure 1 is a visual representation of the impact potential of the following aspects of increasing nursing job satisfaction.

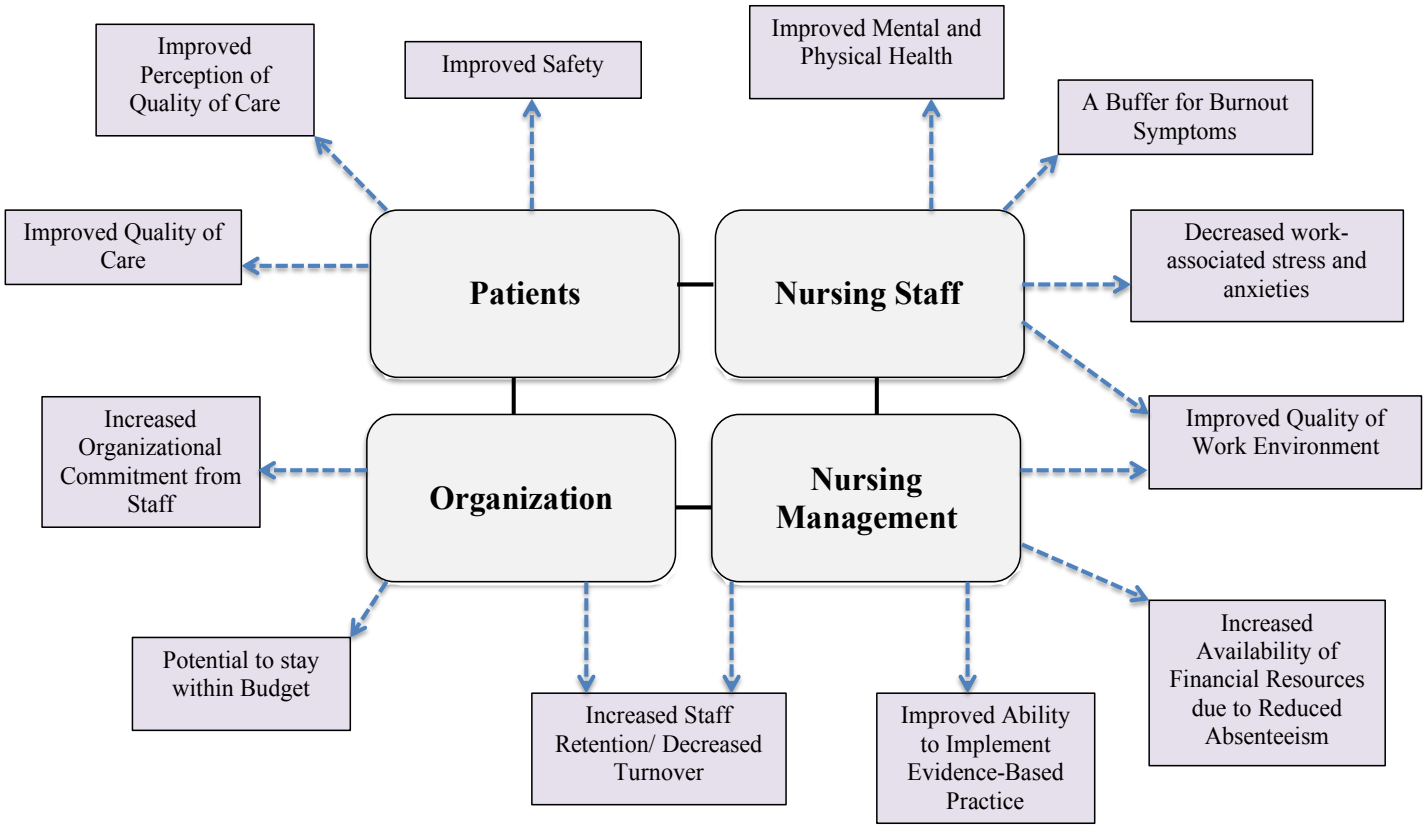

Figure 1. Stakeholders involved when increasing emergency nursing job satisfaction.

Patients: Increasing nurse job satisfaction significantly improves patient safety and quality of care provided to patients (Adriaenssens et al., 2015b; Aiken et al., 2012; Ball et al., 2017; Biegger et al., 2016; Hayes et al., 2010; Lu et al., 2019; O'Mahony, 2011; Orgambídez-Ramos & De Almeida, 2017; Roulin et al., 2014; Strömgren et al., 2016; Suárez et al., 2017; Tarcan et al., 2017). Job satisfaction improvements are also shown to increase staff engagement in clinical improvements related to patient safety (Strömgren et al., 2016). Patient satisfaction and patient perception of the quality of care are both also positively related to nursing job satisfaction (Kvist, Voutilainen, Mäntynen, & Vehviläinen-Julkunen, 2014; Lu et al., 2019).

Nurses: Other than the obvious benefit of enabling nurses to have the personal fulfilment of high job satisfaction, an increase in job satisfaction can also act as a buffer for high levels of burnout (Tarcan et al., 2017). Increasing job satisfaction of nurses can improve physical and mental health, decrease work-related stresses and anxieties (Stathopolou et al., 2011; Strömgren et al., 2016; Yuwanich et al., 2016) also increase work engagement (Lu et al., 2019).

Nurse managers: Increasing job satisfaction can decrease nursing staff turnover and absenteeism (Applebaum et al., 2010), and decrease nurses' intent to leave their current job and also the nursing profession (Kamal, 2011; Lu et al., 2019; Roulin et al., 2014). This increases availability of financial resources, due to the high cost (time and monetary) of finding and orienting new employees. In addition to this, increased job satisfaction can improve evidence-based practice [EBP] implementation (Tarcan et al., 2017), further improving quality of care provided to patients.

The organization: There are many benefits to the organization that come from increasing nursing job satisfaction, including an increase in organizational commitment (Cicolini, Comparcini, & Simonetti, 2014). Higher job satisfaction of nurses can decrease staff turnover

and increase retention (Roulin et al., 2014), which can provide financial benefits to the organization.

The high demand for evidence-based solutions, the number of stakeholders involved, and the potential for the results of this study to have a broad impact contribute to the significance and importance of this research.

Chapter 2. Description of Manuscript and Thesis

Manuscript and Thesis Relationship

In order to get an accurate understanding of the scope of any problem, a thorough and systematic literature search needs to be conducted. This was the starting point of this research. When examining the literature available regarding the topic of nursing job satisfaction, it became quickly evident that the quantity and quality of current research was high. However, it also became clear that there lacked a useable summary of the factors that specifically influence the job satisfaction of emergency nurses. This gap in knowledge was filled by the first manuscript of this thesis, named **Top Ten: A Model of Dominating Factors Influencing Job Satisfaction of Emergency Nurses**. The literature review was conducted not only as an examination of the material available, but as a critical evaluation of the material, and is therefore a critical literature review (Grant & Booth, 2009). This critical literature review deepened the understanding of the topic, filled the gap in knowledge that existed, and also created the solid foundation on which the second manuscript of this thesis could be written. The results of the literature review showed that a large amount of academic knowledge exists regarding the factors that influence the satisfaction of nurses, that many tools exist that measure job satisfaction of nurses, and that there exist interventions that have been shown to influence the job satisfaction of nurses (Staempfli & Lamarche, 2019). It was also clear that there was little information regarding the job satisfaction of emergency nurses specifically. As is shown in the literature review, the work environment of the ED has additional and different stressors when compared to other nursing departments and therefore there exists a need to examine this population independently from other departments. In addition to a lack of emergency specific job satisfaction knowledge, the literature review demonstrated that it is unclear as to why existing knowledge of job satisfaction is not being

translated into practice. These two factors formed the basis of the exploration into the barriers that were preventing the implementation of interventions intended to increase job satisfaction, which resulted in the second manuscript of this thesis named **Size Matters! Barriers to Increasing Job Satisfaction of Emergency Nurses.** These two manuscripts further our collective practical knowledge regarding job satisfaction of emergency nurses and provide a solid foundation on which to further research this timely and important topic.

Publication Information

The first manuscript was submitted to the International Emergency Nursing [IEN] journal and is currently being reviewed for publication. The second manuscript will be submitted to the Journal of Nursing Management.

Privacy, Confidentiality, and Ethical Considerations

The second manuscript involved human subjects and therefore underwent ethics review and was granted approval by the Athabasca University Research Ethics Board [REB] before any contact with participants (Appendix A). The principal investigator completed the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans Course and received certification (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014).

The study was deemed to involve minimal risk to participants and no experimental interventions were performed. Participants were ensured that throughout the process that their participation in the study was entirely voluntary. Each participant was provided with a letter of information to participate (Appendix B) describing the purpose of the study, the details of their involvement, associated risks and benefits, details regarding privacy and confidentiality, and

details regarding the dissemination of the research findings. The document outlined the information that the participant needed to know in order to have enough information to make an informed decision of whether or not they wish to participate in this study. If they chose not to take part or to withdraw at any point in time in the study, it was clear to them that there would be no negative consequences to them now or in the future. Each participant signed the letter of informed consent (Appendix C). Consent forms were saved securely in the password protected computer of the principal investigator in a password protected folder which only the principal investigator and the advisor had access to.

Additional measures were put in place in order to protect the privacy and confidentiality of the data collected. For the online questionnaire used for this study, a secure online web application 'Lime Survey' was used. Lime Survey does not transmit personal data to third parties other than if there is express consent (which there was not) or if there are legal or contractual obligation (Limesurvey, 2018). Also, Lime Survey will under no circumstances draw conclusions about the users personally and uses a Secure Socket layer in conjunction with the highest level of encryption supported by the browser to ensure security of data (Limesurvey, 2018). Each participant received an email with a unique secure link and completed the questionnaire prior to the interview. Once completed, all of the participant's identifying information was removed and substituted with a unique participant identifier. The list that contained this identifier was kept in a separate secure location under password protection only known to the principal investigator and her advisor. All above mentioned files will be kept for five years then destroyed by permanently deleting them off the computer and associated services.

Interviews were conducted using 'Skype'. Skype is a Voice Over Internet Protocol [VOIP] program owned by Microsoft. Participants were called on Skype by the principal

investigator on the phone number the participant provided. Microsoft's privacy policy states that they have the right to review any content in their software and to use content to improve their services but also to personalize advertising (Microsoft, 2018). Much of this data and content usage can be prevented by enhancing privacy settings (Microsoft, 2018), and the most stringent privacy settings were used while conducting interviews. The participants were not using the software therefore did not need to change their privacy settings. Lo Iacono, Symonds, and Brown (2016) maintain that Skype is a useful tool for conducting qualitative research as long as participants are made aware of these privacy issues, which they were. They recommend that the researcher creates a new Skype profile to use for conducting the interviews and after all of the interviews are completed to delete the account, which will delete all of the contacts, email addresses and phone numbers affiliated with this account. This was done.

Interviews were recorded using 'Camtasia 3' a secure screen recording software from TechSmith in addition to the Voice Memo application on the principle investigator's iPhone. The privacy policy for Camtasia 3 states that the company does not use content for their own purposes without consent of the user, which was not given. The Voice Memo recordings on the principal investigator's iPhone (used only as a backup) were permanently deleted once the interview was transcribed. The audio files were stored in a password protected file on a password protected computer under the same unique identifier as the questionnaire portion of the study. All audio data will be destroyed after five years, by permanently deleting them off the computer.

Interviews were transcribed using 'Scribie', a secure online transcription service, in conjunction with manual transcription. The file names contained only the unique participant identifier. Interview transcripts were password protected and stored on the primary investigator's password protected computer. Printed transcripts and other paper items were stored in a locked

filing cabinet. Only the primary investigator and supervisor had access to this information. All original transcripts will be destroyed after five years, by either permanently deleting them off the computer or with an electronic paper shredder.

Chapter 3.

Manuscript I: "Top Ten: A Model of Dominating Factors Influencing Job Satisfaction of Emergency Nurses"

Abstract

Increasing emergency department (ED) visits per capita, combined with an aging population and ongoing budgetary constraints in Canada's health care system necessitate continuous improvements to ensure that patients remain safe and continue to receive high quality care. Addressing ED nursing job satisfaction is a cost-effective way of improving safety and quality of hospital care. A scoping literature review was conducted to examine the breadth of job satisfaction literature and identify the factors that specifically influence the job satisfaction of ED nurses. A review of 161 journal articles revealed 34 articles fitting the inclusion criteria, which were included in the final analysis. There were ten predominant factors that allowed for workplace interventions, including six that did not achieve consensus. The ten factors are presented in the form of a practical model for implementation based on the Herzberg two-factor theory and the Maslow hierarchy of needs theory. The model informs healthcare leaders how to pragmatically understand job satisfaction specific to ED nurses. This information in turn can be used to design interventions that increase job satisfaction while maintaining safety and quality of care.

Key Terms: leadership, healthcare management, emergency nursing, emergency department, emergency service, emergency room, work satisfaction, patient safety, quality of care, Mazlow, Herzberg

Top Ten: A Model of Dominating Factors Influencing Job Satisfaction of Emergency Nurses

Job satisfaction is a complex, multi-faceted issue. A wealth of literature exists surrounding job satisfaction of nurses, but there lacks an evidence-based synthesis of literature tailored specifically to job satisfaction in ED nurses. With the chaotic and unpredictable work environments that are inherent to EDs, nursing leaders need to retain trained and competent nurses in order to function successfully as a department and would benefit from a practical synthesis of job satisfaction literature.

The total number of emergency department [ED] visits in Canada increased from 1.7 visits per 10 Canadians in 2005 to 3.2 visits per 10 Canadians in 2016 (National Ambulatory Care Reporting System, 2017; Statistics Canada, 2017c). In a comparison of eleven countries in 2010, Canada was shown to have the highest number (44%) of people that reportedly visited the ED at least once in the past two years (The Commonwealth Fund, 2011). With the per capita rate of ED visits projected to increase in combination with an aging population, there will be increased pressure on EDs and nursing staff to provide adequate care to patients amidst these higher volumes.

Replacing absent staff can be a costly burden for nursing departments. In 2016, there were 24,600 Canadian nurses absent due to illness or disability on a weekly basis, amounting lost hours equal to an annual workload of 15,900 nurses (Jacobson Consulting Inc., 2017). The total cost of public sector health care nurses that missed work due to illness and disability in addition to the cost of nurses working for paid and unpaid overtime amounted to 989.3 million dollars for Canadian provinces in 2016 (Jacobson Consulting Inc., 2017). It is clear that the health of staff,

turnover, absenteeism, and intent to leave, all have direct influence on the health care organization's ability to successfully run their ED.

Methods

Aims. This review addressed two related goals; to examine the breadth of job satisfaction literature and identify the factors that specifically influence the job satisfaction of ED nurses.

Search strategy. A systematic literature search was conducted through a university library search engine. The journal articles that are used in this literature review come from the following databases: Academic OneFile, Academic Search Complete, CINAHL Plus, Directory of Open Access Journals, Informit Health Collection, MEDLINE, ScienceDirect, and SwePub. The search included the Boolean terms "job satisfaction" OR "job dissatisfaction" [abstract] AND nurs* [abstract] AND emergency OR "acute care" [abstract] AND NOT "nurse practitioner*" AND NOT "long term care" OR "nursing home". Only peer-reviewed publications in the English language that were published between the years 2008 to 2018 are included.

Eligibility and relevance. The full text of the 161 publications were screened for quality of research based on recommendations by Bhattacherjee (2012). It should be noted that this process has the potential to introduce researcher bias since no structured tool was used. Articles were screened for eligibility criteria and includes research done in EDs from countries that are most similar to Canada in terms of industrialization and development, studies done in the ED and studies done hospital-wide. Only those articles addressing factors that apply specifically to the workplace were considered. Studies have shown that group-level workplace factors have a higher potential of predicting a response in job satisfaction than individual-level factors (Roulin

et al., 2014). Personal characteristics (extroversion, resilience) and personal demographics (age, years worked, education) are individual factors that are difficult or impossible to manipulate with a workplace-implemented intervention, and therefore are excluded from this literature review.

In order to gain more depth and increase the breadth of material, the reference lists of the journal articles that fit the inclusion criteria were examined for additional material, and those were retrieved through the library database. In total, 34 articles fit the inclusion criteria and are included in this review. Figure 2 demonstrates the selection of articles in the literature review.

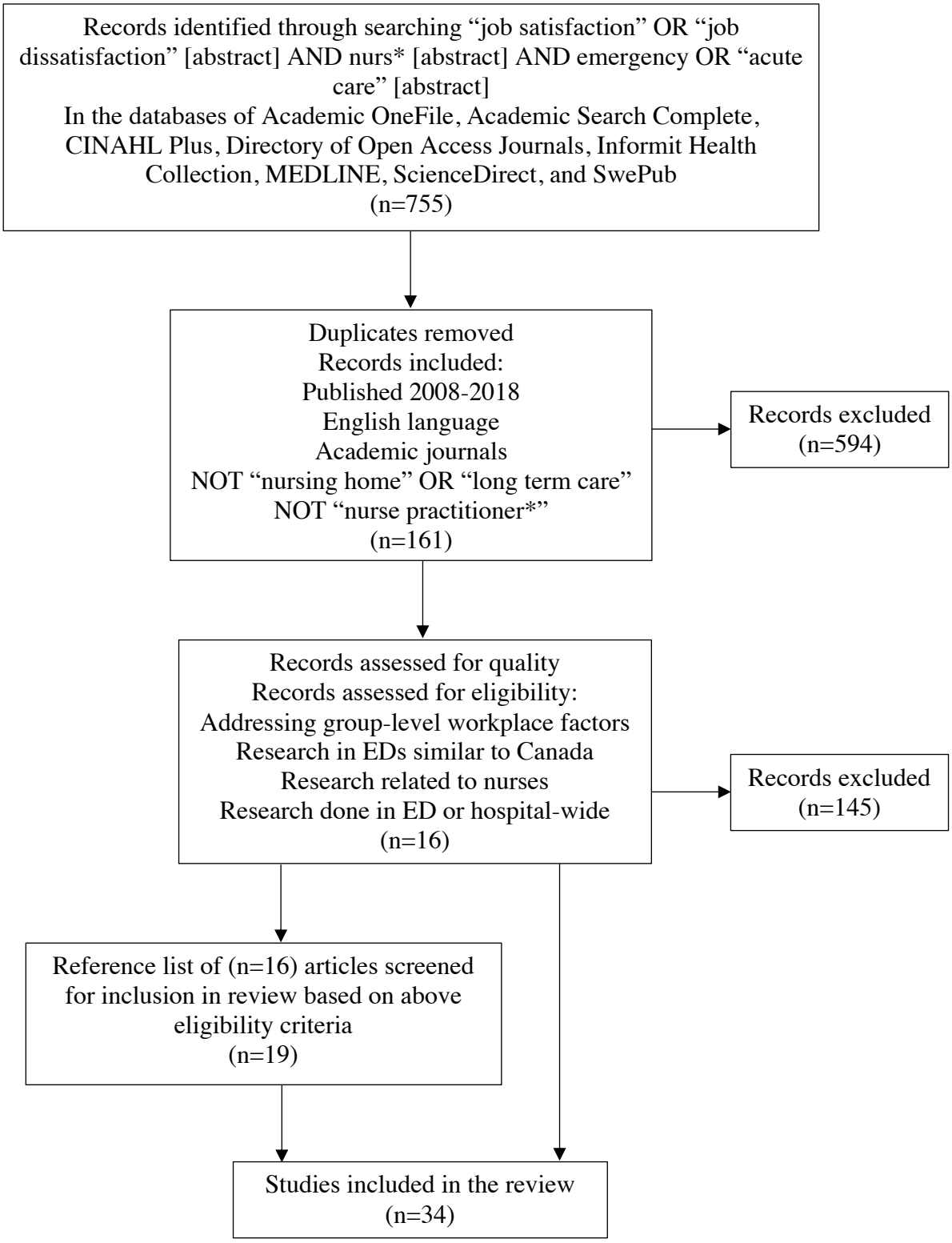

Figure 2. Flow diagram demonstrating selection of articles in literature review.

Theoretical foundations. In order to logically organize and make use of the vast amount of information gathered from the review of job satisfaction literature, a theoretical lens will be applied. A hierarchical framework of workplace factors affecting job satisfaction will be established using the two-factor theory and the hierarchy of needs theory.

Herzberg's two-factor theory (Herzberg, 2003), and Maslow's hierarchy of needs theory Maslow (1943) are two literature supported evidence-based needs theories that enable nursing leaders to better understand employee job satisfaction. Needs theories are directed at determining which needs motivate people (Daft, 2015). These theories postulate that when leaders have a better understanding of the needs of their employees, the more leaders can create tailored strategies to motivate their staff (Daft, 2015). Maslow (1943) states that when a person's life is dominated by a certain need, it is difficult to advance in other areas of life. Therefore, determining the needs of the staff is a critical step in implementing job satisfaction improvement strategies for nursing leaders.

Herzberg's two-factory theory of motivation and job satisfaction grew out of academic research establishing the ineffectiveness of punishment-reward management systems (Herzberg, 2003). Although the theory was developed in the 60's, Herzberg's theory still remains frequently cited and relevant in healthcare-related job satisfaction literature today (Gaki, Kontodimopoulos, & Niakas, 2013; Helbing et al., 2017; Holmberg, Caro, & Sobis, 2018). Herzberg theory indicates that there are two types of factors that influence job satisfaction: hygiene factors (which lead to job dissatisfaction) and motivating factors (which lead to job satisfaction) (Herzberg, 2003). The presence of hygiene factors leads to job dissatisfaction, but the removal of these factors decreases dissatisfaction resulting only in neutral satisfaction (neither satisfied not

dissatisfied) and not an increase in job satisfaction (Herzberg, 2003). The presence of a motivator, on the other hand, can increase the level of job satisfaction (Herzberg, 2003).

Maslow's well-known hierarchy of needs theory was developed in the 40's, has influenced needs-based motivational theories across a large spectrum of disciplines, and is still prevalent in current nursing literature (Foster, 2017; Gaki et al., 2013). Maslow proposed a hierarchy of needs where human nature is motivated by fulfilling the need that is most pertinent to them at that specific time (Maslow, 1943). Once a need is fulfilled, one progresses up the hierarchy until each subsequent need is fulfilled (Maslow, 1943). Maslow postulates that higher-up needs cannot be satisfied before the lower-down needs are met (Daft, 2015), presenting a step-wise progression up a hierarchy of needs. The six categories of needs begin with the most basic physiological needs (food, water, air), and progress upwards through the safety needs (physical safety and psychological safety), belonging needs (a place in a group, social support), esteem needs (recognition, achievements, status), and ultimately end with the most complex need of self-actualization (ability to live out one's full potential) (Maslow, 1943).

When examining job satisfaction literature through these two needs theories, each workplace factor affecting job satisfaction falls into one of these six categories of needs, which corresponds to either a hygiene or motivating factor. Combining the two-factor theory and the hierarchy of needs together into one guiding framework allows for the development of a prioritizing system in order to better conceptualize the synthesis of literature surrounding workplace factors affecting job satisfaction.

Results

Job satisfaction. In a study that included 1,105 acute care hospitals across Europe and the United States, Aiken et al., (2012) concluded that a cost-effective way of improving patient

safety and quality of hospital care is targeting hospital work environments, such as job satisfaction of nursing staff. Job satisfaction of nursing staff has been shown repeatedly in literature to have a direct effect on the quality of health care provided, as well as on patient safety (Adriaenssens, De Gucht, & Maes, 2015b; Aiken et al., 2012; Ball et al., 2017; Biegger, De Geest, Schubert, & Ausserhofer, 2016; Hayes et al., 2010; Lu, Zhao, & While, 2019; O'Mahony, 2011; Orgambídez-Ramos & De Almeida, 2017; Roulin, Mayor, & Bangerter, 2014; Strömgren, Eriksson, Bergman, & Dellve, 2016; Suárez et al., 2017, Tarcan et al., 2017). Research indicates that job satisfaction is closely related to mental and physical health of nursing staff (Stathopolou, Karanikola, Panagiotopoulou, & Papathanassoglou, 2011; Strömgren et al., 2016; Yuwanich, Sandmark, & Akhavan, 2016), nursing staff turnover and absenteeism (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010), and intent to leave (De Simone, Planta, & Cicotto, 2018; Kamal, 2011; Roulin et al., 2014). It is important to note that an employee's intent to leave an organization significantly influences actual quitting behaviour, whether leaving one position for another, or leaving the organization altogether (Kamal, 2011).

Job satisfaction in emergency departments. For Canadian nurses, the type of job setting has a significant influence on levels of nursing job satisfaction (Kamal, 2011). EDs are notoriously chaotic, unpredictable environments that expose nurses to a broader variety of stressors when compared with other nursing units (Adriaenssens, De Gucht, & Maes, 2015a). EDs often challenge nurses with heavy workloads, have a high risk of exposure to interpersonal conflict and violence, and involve high acuity patients (Yuwanich et al., 2016). In a study done in Ireland, O'Mahony (2011) reported that ED nurses perceive to be overburdened, undervalued by supervisors, and have a lack of available staff and material resources, while simultaneously perceiving that superiors expect the maintenance of a high standard of care.

Existing research of emergency department nurses. There is a lack of research surrounding the levels of job satisfaction in nurses working in EDs in Canada. In 2005, CIHI released the national nursing job satisfaction levels for all Canadian nurses in the National Survey of Work and Health of Nurses. CIHI (2005) reported that 88% of all Canadian nurses were satisfied with their jobs, compared to 92% job satisfaction of the general population. Although this report demonstrated that nurses are slightly less satisfied with their jobs when compared to the rest of the population, it does not serve as an accurate (or current) representation of job satisfaction of ED nurses. The work environments and stressors of the ED may not be comparable to those of other nursing units (Adriaenssens et al., 2015a) and the number of ED visits have significantly risen since 2005 (National Ambulatory Care Reporting System, 2017; Statistics Canada, 2017), therefore these results should not be extrapolated to assess current ED nursing job satisfaction levels.

Job satisfaction in international literature. Internationally, the literature on ED nursing job satisfaction present issues of generalizability and also reliability. One study done by Helbing, Teems, and Moultrie (2017) in the USA, indicated that job satisfaction levels of ED nurses were 72%. However, only 89 respondents answered the questionnaire on a voluntary basis that was posted to social media using a non-verified instrument, and it was not indicated which hospitals were sampled in the study. Thus, although these results are recent, due to sampling and responder bias and limitations to generalizability, they cannot be reliably extrapolated to Canadian ED nurses. Another study done in Spain showed that only 46% of ED nurses were satisfied with their jobs (Suárez et al., 2017). However, the sample size only included 68 nurses from one large urban hospital in Barcelona, therefore also raising issues of generalizability of results.

Even in the wide-reaching study conducted by Aiken et al. (2012) which used sound sampling techniques of 1,105 acute care hospitals across Europe and the United States, the results showed incredible variability across countries and failed to distinguish between units. Results ranged from 11% job dissatisfaction of nurses in the Netherlands, to 56% job dissatisfaction of nurses in Greece (Aiken et al., 2012). Therefore, there is no clear indication of what the actual levels of job satisfaction of ED nurses are in Canada or around the globe. However, based on the understanding of the above-mentioned issues of increasing ED visits, an aging population, budgetary constraints, availability of nurses, the work environment of EDs and the knowledge that addressing job satisfaction is a cost-effective way of benefiting patients, nurses, and the organization, it is worth investigating deeper into this subject matter.

Discussion

This section presents the ten workplace factors that have been shown in this literature review to directly influence nursing job satisfaction levels. Figure 3 is a visual representation and summary of these workplace factors applied to the Two-Factor Theory and the Hierarchy of Needs Theory. The factors are organized in this systematic hierarchical structure to increase the ability of managers to assess the needs of their ED nurses and design systematic evidence and theory-based interventions that target job satisfaction.

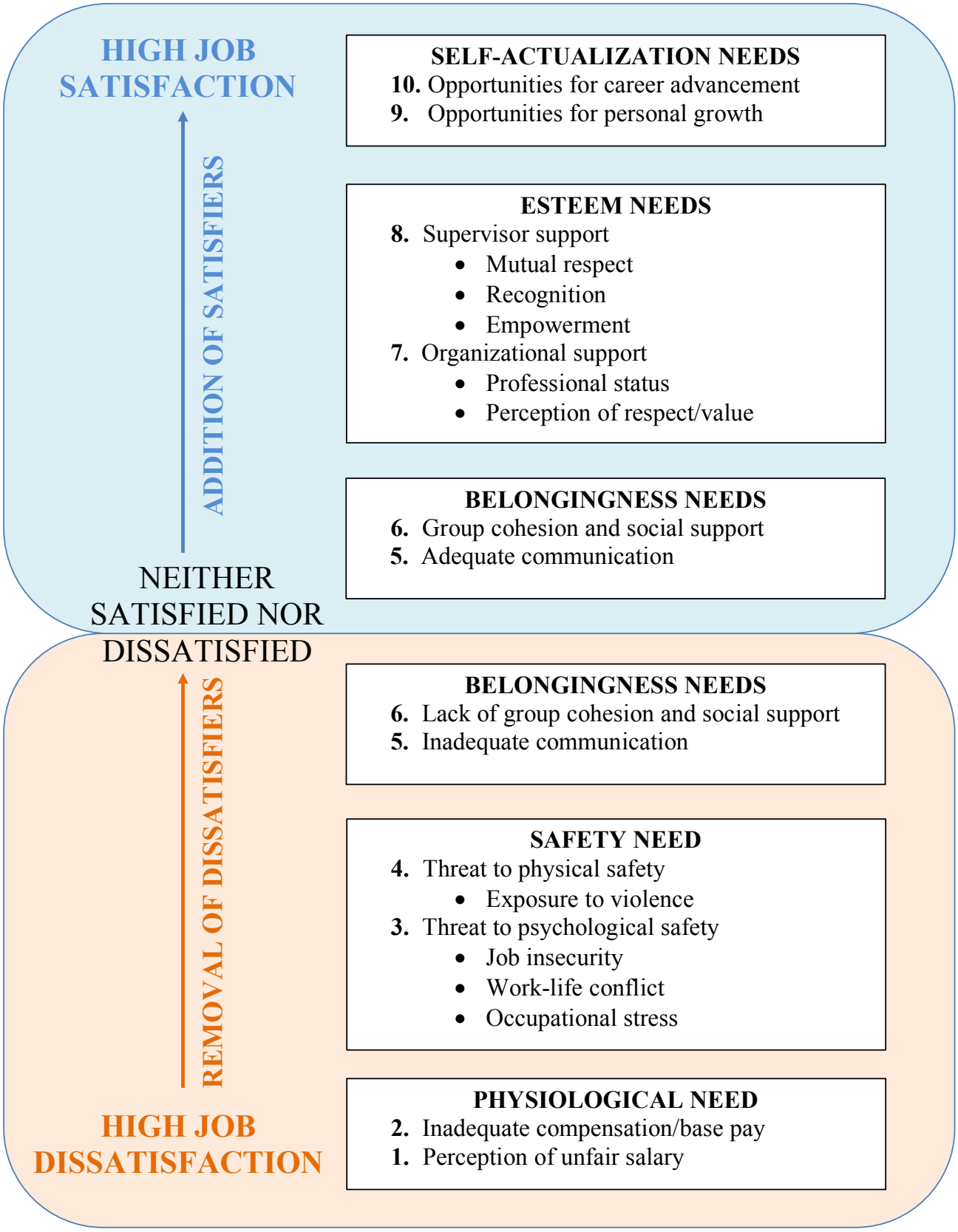

Figure 3. Model of top ten factors influencing job satisfaction of emergency nurses.

Physiological need. In modern-day society, workers require a minimum amount of pay to be able to fulfill the basic physiological needs, which Maslow (1943) defines as food, water, and shelter. Historically, base level of pay in the healthcare field has been shown to increase job dissatisfaction when it is absent (Alshallah, 2004). Although no current research was found involving pay and job satisfaction of ED nurses, according to a recent large-scale survey report released by the Association of Perioperative Registered Nurses, when compensation is considered inadequate, it can cause job dissatisfaction (Bacon & Stewart, 2017). However, when pay is considered adequate or better than adequate, it is not a significant source of job satisfaction (Bacon & Stewart, 2017).

Hayes et al., (2010) reported that older nurses seemed to be more satisfied with pay and younger nurses more dissatisfied, but this was affected by unionization, which increases compensation based on number of years of service versus qualification or level of position.

In the ED setting, Yuwanich et al., (2016) demonstrated that nurses have increased occupational stress when they perceived their pay to be inadequate when compared to others, which could in-turn increase job dissatisfaction. Under the two-factor theory, compensation is a hygiene factor, because when nurses consider pay to be adequate, it decreases job dissatisfaction but does not act as a motivating factor by increasing job satisfaction.

Safety need. Maslow (1943) stated that unmet safety needs can be just as dominating as unfulfilled physiological needs. Under the two-factor theory, safety needs are classified as hygiene factors, which contribute to job dissatisfaction.

Workplace violence including verbal abuse, physical threats, and physical violence are not only widely prevalent in emergency departments but have also been shown to significantly affect job satisfaction of nurses working in the ED (Yoon & Sok, 2016; Yuwanich, et al., 2016).

Kwon states that in South Korea, “ER nurses experience 16 times more incidences of violence than those in other occupations” (as cited in Yoon & Sok, 2016, p. 597). It is an important issue for Canadian nurses as well, with incidences of workplace violence rising steadily over the past few years (Canadian Federation of Nurses Unions, 2017).

Psychological safety needs include job security, work-life conflicts, and occupational stress. Historically, when governments are forced to cut costs in the health care sector, nursing jobs are affected and there are new emergent threats to nursing job security (Burke, Ng, & Wolpin, 2015). Burke et al., (2015) examined data from the 1990’s where large cuts to the California healthcare system were experienced and many nurses felt their job security to be threatened. They discovered that threats to job security negatively affect job satisfaction (Burke et al., 2015). No current ED-specific data was found.

Work-family, or work-life conflict can be caused by conflicting time demands of work and family, spillover from of work into family or vice versa, and an incompatibility between roles at work and roles at home (Roulin et al., 2014). The study done by Roulin et al., (2014) was conducted in Switzerland, assessing 1,547 nurses on 245 units in 17 hospitals in Switzerland. Although non-specific to the ED, the study’s focus was to explore how to retain nursing personnel, and the large sample size and rigorous analysis resulted in highly useable data. Roulin et al., (2014) discovered that high levels of work-life conflict are strongly related to job dissatisfaction. Conflicts arise when responsibilities of work clash or limit the responsibilities the staff has for family (Roulin et al., 2014). This is especially an issue in EDs, as these departments are open 24 hours requiring staff to work all hours (including evenings and nights) increasing the chance that they have conflicting family responsibilities. Having improper staffing has been shown to decrease staff morale, decrease quality of care, and increase prevalence of work-family

conflict (Hayes et al., 2010). Nurses value flexibility of their schedules and increasing work-life conflict has been shown to increases nurse's intent to leave an organization (Kamal, 2011; Roulin et al., 2014; Yamaguchi, Inoue, Harada, & Oike, 2016). Flexible shift scheduling has been shown in literature to promote good work-life balance (Adriaenssens et al., 2015a; Tarcan et al., 2017; Hayes et al., 2010).

EDs are notoriously chaotic unpredictable environments that expose nurses to a broader variety of stressors (Adriaenssens et al., 2015a). ED nurses that have a high amount of perceived stress in their work environment are less likely to be satisfied with their job and have increased intent to leave their organization (Yuwanich et al., 2016). In addition to this, repeated exposure to traumatic events can lead to psychological stress, which can greatly affect job satisfaction (Adriaenssens, De Gucht, & Maes, 2012).

Belongingness need. The belongingness needs are a unique set of needs when applied to Herzberg's two-factor theory in a sense that these needs can classify as either a motivating factor that increases job satisfaction, or a hygiene factor that increases job dissatisfaction. Group cohesion and social support has been shown in literature to be one of the strongest workplace factors that affects job satisfaction in emergency room nurses (Adriaenssens et al., 2015a; Suárez et al., 2017). Numerous other studies done on other nursing units have also shown a positive relationship between nursing job satisfaction and social support (Giauque et al., 2014; Hayes et al., 2010; Holmberg et al., 2018; Orgambídez-Ramos & De Almeida, 2017; Roulin et al., 2014; Strömgren et al., 2016). Social support can act as a factor that improves job satisfaction (motivating factor) and also as a factor that decrease dissatisfaction (hygiene factor), which is supported by findings in Holmberg et al., (2018). Although Holmberg et al. (2018) examine job satisfaction in a Swedish mental health nursing environment, the results of their research are

pertinent to this discussion due to the fact that mental health nursing includes many aspects that parallel the ED when examining job satisfaction literature including frequent exposure to violence, shortage of nurses, and workplace-related stresses and anxieties.

Strong interpersonal relationships between nursing colleagues in the ED are an important buffer when exposed to traumatic work situations (Adriaenssens et al., 2015a) and act as a protective factor against stress (Hayes et al., 2010; Orgambídez-Ramos & De Almeida, 2017) and professional burnout (Suárez et al., 2017). Even when nurses merely perceive their group to work effectively together, this has been shown to increase satisfaction (Roulin et al., 2014). Social support within nursing is embodied by trust, recognition of effort, and following norms of reciprocity (helping each other) (Strömgren et al., 2016). When social support is present, it can provide nurses with social capital, meaning this support is a resource that can provide nurses with future returns, and this social capital can significantly increase nursing job satisfaction (Strömgren et al., 2016). Social capital can involve relationships with both coworkers and supervisors. Job satisfaction increases when nurses feel that they have social support from their supervisor (Adriaenssens et al., 2015a; Hayes et al., 2010; Orgambídez-Ramos & De Almeida, 2017). However, lack of social support from their supervisors can result in increased dissatisfaction, as Spence Laschinger et al., (2009) demonstrated that supervisor and co-worker incivility accounts for 15% variance of nursing job satisfaction.

Group cohesion is therefore an important workplace factor affecting job satisfaction, and when good social support is in place, it can not only decrease dissatisfaction but also act as a motivating factor in increasing nursing job satisfaction. Part of having effective group cohesion and establishing social support involves being able to adequately communicate between all team members. Communication is vital to provide a feeling of wellbeing at work for nurses working in

an emergency environment (Adriaenssens et al., 2015a). Cortese (2007), as cited in Hayes et al. (2010) found that inadequate communication between supervisors and nurses increases job dissatisfaction in nurses. Havens, Gittell, and Vasey, (2018) also found that adequate communication and good interpersonal relationships increase nursing job satisfaction. High quality communication includes communication that is frequent, timely, accurate, and focused on problem solving, and high-quality relationships include having shared goals, shared knowledge, and mutual respect amongst the team members (Havens et al., 2018). Together, these elements constitute a concept called relational coordination and this not only increases nursing job satisfaction but also increases quality, safety, and efficiency of care (Havens et al., 2018). Havens et al. (2018) showed that level of relational coordination were lowest in the ED when compared to the other units. A lack of adequate communication can increase nursing job dissatisfaction and the presence of adequate communication can increase job satisfaction for ED nurses.

Esteem need. Maslow argues that once physiological, safety, and belongingness needs are satisfied, a desire then emerges to receive respect and acknowledgement, and to achieve self-esteem and esteem for others (Maslow, 1943). In a health-care setting, esteem needs are fulfilled by supervisors and the organization, and are motivating factors that can significantly increase nursing job satisfaction. Social support from a supervisor is only one aspect of increasing nursing job satisfaction, but supervisor support in the forms of respect and empowerment can additionally significantly improve nursing job satisfaction and contribute to the esteem needs of nurses.

For ED nurses, it has been shown that having respect from supervisors and getting recognition from their supervisors regarding work accomplishments can significantly increase

job satisfaction (Adriaenssens et al., 2015a). O'Mahony (2011) states that especially in high-stress high-pressure environments like the ED, it is vital for nurses to receive recognition from supervisors of the difficult work they are undertaking. In addition to respect and acknowledgement, having a supervisor present in the work environment who has good conflict resolution skills can also increase job satisfaction (Adriaenssens et al., 2015a; Hayes et al., 2010). By being present in the department, leaders also have the potential to support a culture of relational coordination, additionally improving nursing job satisfaction (Havens et al., 2018).

Another aspect of supervisor support needed to increase job satisfaction is leader-based empowerment. Empowerment of nurses has been shown in non-ED specific literature to significantly improve job satisfaction of nurses (Cicolini, Comparcini, & Simonetti, 2014; Dahinten, Lee, & MacPhee, 2016; Spence Laschinger, Leiter, Day & Gilin, 2009; Spence Laschinger, Nosko, Wilk, & Finegan, 2014). Spence Laschinger et al. (2014) completed a longitudinal study of Canadian nurses in 49 Ontario hospitals and discovered that empowering nurses leads to greater perceived unit effectiveness which results in an increase in job satisfaction. In an earlier study, Spence Laschinger et al. (2009) reported that as much as 22.8% of job satisfaction variance in Canadian nurses can be explained by empowerment. Dahinten et al. (2016) also found that leadership-directed empowerment improved job satisfaction in nurses and although this study was not ED-specific and included community hospitals, it was a Canadian-based study that included over 1000 nurses. The one study that addressed nursing empowerment in the ED showed that in the 6 hospitals sampled in the Eastern United States, there was only a moderate perceived level of empowerment among nurses (DeVivo, Quinn Griffin, Donahue, & Fitzpatrick, 2013). These aforementioned studies demonstrate that there is the possibility for improvement in job satisfaction by addressing empowerment.

Key aspects of empowerment include allowing nurses to engage in clinical improvements (Spence Laschinger et al., 2014; Strömgren et al., 2016), allowing nurses to be involved in ward decision making (Adriaenssens et al., 2015a, Hayes et al., 2010), and giving nurses access to information, resources and support to complete their work (Spence Laschinger et al., 2014.) One aspect of an esteem need is the need to feel professional status and pride (Hayes et al., 2010). It is important that nurses feel that their organization is allocating resources and investing in nursing and in the functioning of the department (Roulin et al., 2014). This type of perceived respect, facilitated by communication, can increase job satisfaction, and increase nurses' intent to stay with the organization (Hayes et al., 2010; Roulin et al., 2014). Additionally, just as direct supervisors influence job satisfaction by being present in the department, it is also beneficial to have higher ranking people from the organization (such as nursing directors) visible in the department to increase the perception that the organization cares about their nurses (Roulin et al., 2014). Cicolini, Comparcini, and Simonetti (2014) indicate that this type of structural empowerment is a strong predictor of both job satisfaction and organizational commitment.

Self-actualization need. Self-actualization is the final level of needs in Maslow's (1943) hierarchy. This can vary greatly from person to person (Maslow, 1943), but in ED nurses, self-actualization can be achieved through personal growth and availability of opportunities to advance one's career (Adriaenssens et al., 2015a).

The availability of educational resources to promote career enhancement is one aspect of organizational empowerment, or structural empowerment, that significantly influences nursing job satisfaction (Cicolini et al., 2014; Dahinten et al., 2016). The aspects of organizational empowerment that can promote self-actualization include enabling and encouraging nurses to

participate in committees, inter-departmental group work, task forces and anything that allows nurses to increase their knowledge and skills (Spence Laschinger et al., 2009).

Career opportunities involving study leaves, annual leaves, and educational possibilities are also important factors that contribute to nursing job satisfaction (Biegger et al., 2016). Switzerland has one of the highest rates of nursing job satisfaction in the world, with only 21% of nurses reporting job dissatisfaction in 2012 (Aiken et al., 2012). Yet a needs assessment study of Swiss nurses showed that the largest predictor of job satisfaction and intent to leave among these nurses was due to the fact that their highest order needs (of self-actualization) had not adequately been fulfilled (Biegger et al., 2016). Aiken et al., (2012) state that providing staff with educational opportunities provides an important long-term benefit to a department (regardless of country) and can improve job satisfaction and retention of nursing staff.

Findings that do not have consensus in literature. In a systematic review of job satisfaction literature, Hayes et al (2010) concluded that only 10 of 17 studied conducted on job satisfaction determined that nursing autonomy had a direct link with job satisfaction. Adriaenssens et al. (2015a) and Holmberg et al. (2018) also indicated a link between job satisfaction and professional autonomy/job control. However, results from Hayes et al, (2010) clearly indicated that culture had a heavy influence on affecting the correlation between autonomy and job satisfaction. In China, autonomy was not related to job satisfaction, but in Ireland, there was a strong correlation between autonomy and higher job satisfaction (Hayes et al., 2010). In a study performed in Switzerland, autonomy did not have any significant correlation with nursing job satisfaction even when individual and group level factors were controlled for (Roulin et al., 2014). Cultural context should be therefore taken into consideration when examining the role of autonomy in nursing job satisfaction.

Spence Laschinger et al., (2009) reported that all three dimensions of burnout (emotional exhaustion, depersonalization, personal accomplishment, and cynicism) account for 8.3% of job satisfaction variation. Adriaenssens et al., (2015b), however, reported that emotional exhaustion on its' own (and not the other variables) is the only significant predictor of job satisfaction. Emotional exhaustion manifests in nurses as a lack of focus, lack of assumption of responsibility when coworkers ask for assistance, and fear of going to work the next day (Tarcan et al., 2017). This is thought to be due to feelings of stress and frustration associated with the job (Tarcan et al., 2017). Some factors that can influence emotional exhaustion in the ED include social harassment, frequency of exposure to traumatic events, and lack of active coping mechanisms (Adriaenssens et al., 2015b), which have also been proven in literature to influence job satisfaction (see above).

Although it is clear that burnout and job satisfaction are interconnected, there has been no consensus about a causal relationship in either direction (Roulin et al., 2014; Tarcan et al., 2017). Tarcan et al., (2017) states that because the burnout and job satisfaction are so tightly linked, organizations should try to design interventions targeted at decreasing burnout and job dissatisfaction simultaneously versus separately.

There is much debate in literature surrounding the existence of a correlation between shift length and nursing job satisfaction. It has been shown that nurses working greater or equal to 12-hour shifts have the potential for increased job dissatisfaction (Dall'Ora, Griffiths, Ball, Simon, & Aiken, 2015). Initially, 12-hour shifts were implemented owing to the idea that increased shift length would decrease number of handovers, increasing productivity and decreasing interruption of care thus improving patient safety (Dall'Ora et al., 2015). Overall, this was well received from nursing staff due to perceived benefits of improved work-life balance (Dall'Ora et al., 2015;

Walker & Clendon, 2015). However, in reality, when comparing nurses that worked 8-hour shifts to those working 12-hour shifts, the odds of reporting job dissatisfaction increase by 40% in those working greater than or equal to 12 hours (Dall'Ora et al., 2015). In addition to this, nurses who worked greater than or equal to 12-hour shifts had a greater likelihood of reporting intention to leave their current job due to job dissatisfaction when compared to those working 8 hours or less (Dall'Ora et al., 2015). It is argued that 12-hour shifts require increased time to recover sleep and maintain psychological and physical well-being (Dall'Ora et al., 2015) and have the potential to put the patient's as well the nurse's health and safety at risk (Estryn-Béhar & Van der Heijden, 2012). However, although the study done by Dall'Ora et al., (2015) included data from 12 different European countries, it was cross-sectional therefore unable to infer causality, not done specific to the ED, and weekly hours and breaks were not controlled for. Therefore, although a promising workplace factor, and one that would have an obvious solution (decrease shift length), more work needs to be done to research its' effects on job satisfaction of ED nurses.

Literature differs in determining if availability of resources (including supplies and equipment) influences job satisfaction. Hayes et al., 2010 reported that not having resource adequacy (up-to-date supplies and working equipment) lowers job satisfaction. However, Adriaenssens et al., (2015a) reported that material and personnel resources were not related to nursing job satisfaction. More research clearly needs to be done to determine its influence.

Conclusion

There is a plethora of information regarding job satisfaction of ED nurses, but it is clear that there remain large gaps in the data. In order to get an accurate sense of scale of the issue of job satisfaction of ED nurses in Canada (and worldwide), there needs to be an accurate and

updated measure of the baseline level of job satisfaction. There is no current Canada-wide baseline in the literature. Additionally, more research needs to be done regarding the validity and reliability of specific workplace interventions intended to increase job satisfaction. Although many authors of research articles have suggested interventions to improve job satisfaction, they have not yet been properly researched. This information would greatly contribute to the creation of a tool or framework that could help nursing leaders implement targeted and specific interventions that have the opportunity to significantly influence job satisfaction of their ED team.

Furthermore, those issues that have been presented above lacking consensus in literature should be applied to ED-specific settings using more rigorous research methods in order to dispel contradicting results. The issue concerning the use of 12-hour shifts should be at the forefront of research, as this factor would not only be able to be easily manipulated, but also has the potential to significantly impact job satisfaction and affect all stakeholders.

One of the most important gaps in evidence concerns the validity of the job satisfaction needs hierarchy proposed in this literature review. Although results are not generalizable, and the study was not done specific to the ED, the article by Gaki et al. (2013) did demonstrate that there exists a relationship between the motivation theories of Maslow and Herzberg and the job satisfaction of nurses. This is a promising indication that a hierarchical relationship between workplace factors could exist in practice, but it still needs to be researched rigorously in a Canadian ED context in order to determine if the hierarchy is statistically significant.

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Chapter 4.

Manuscript II: "Size Matters!

Barriers to Increasing Job Satisfaction of Emergency Nurses"

Abstract

Increasing number of visits to the emergency department (ED) per capita, an aging population, and a slowing growth of the nursing workforce highlight the need for innovative and practical solutions to maintain safety of patients. It is well known that job satisfaction of nurses influences patient safety and increases nursing retention rates, but there is a lack of understanding what is preventing the implementation of interventions that increase job satisfaction of ED nurses. A mixed methods study based on the pragmatic paradigm was conducted examining real-world barriers facing ED managers attempting to increase job satisfaction of nurses. Managers were chosen from various sizes of hospitals across Ontario (Canada). Results demonstrated that ED managers had a high level of understanding and attributed a high level of importance to the topic. Three main barriers to increasing nursing job satisfaction included lack of control, lack of time, and lack of tools, and varied greatly based on hospital size. The three main barriers can not only act individually in preventing managers from influencing job satisfaction but can also act synergistically and create nursing shortage feedback loops that are difficult to break. Policy makers and healthcare leaders should take note of the different types of barriers faced by the different sizes of hospitals to ensure successful implementation of job satisfaction interventions for ED nurses.

Key Terms: leadership, healthcare management, emergency nursing, emergency department, work satisfaction, policy, pragmatism, implementation research, practical research

Size Matters!

Barriers to Increasing Job Satisfaction of Emergency Nurses

Increasing numbers of emergency visits across Canada (National Ambulatory Care Reporting System, 2017) and an aging population (Statistics Canada, 2017a), combined with a slowing growth of the nursing workforce (Canadian Institute for Health Information [CIHI], 2017) are highlighting the need for innovative and practical solutions in the emergency department [ED]. Factors including heavy workloads, increased exposure to violence and conflict, and a high acuity of patients (Yuwanich, Sandmark, & Akhavan, 2016) make the ED a challenging workplace for nurses. It is known that influencing job satisfaction is a cost-effective way to influence a work environment, which influences patient safety and quality of care (Aiken et al., 2012), can influence nursing absenteeism and turnover (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010) as well as nursing health (Yuwanich et al., 2016). Staempfli & Lamarche (2019) describe the clear gap in literature regarding practical research involving nursing job satisfaction in the ED, which needs to be filled in order to optimize the implementation of interventions and increase benefits of increasing job satisfaction of ED nurses in practice. Since these benefits will only be realized when the evidence is translated into practice, there is a need for practical research to guide this translation of knowledge into the healthcare system. Studies that explore barriers and facilitators of evidence-based practice implementation are essential in increasing knowledge translation into practice (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015).

In order to fill this existing gap in knowledge, a mixed methods research study was conducted based on the pragmatic paradigm in order to explore the real-world barriers faced by ED managers when attempting to increase the job satisfaction of nurses. Managers were chosen

from various sizes of hospitals across a province of Canada to understand practical differences in barriers faced according to population distribution.

Methods

Aims. To determine what barriers prevent the implementation of interventions that increase job satisfaction of emergency nurses, and what needs to be done to overcome them.

Theoretical framework. This study is focused on the importance of the practical implications of results, which is embodied by the pragmatic paradigm. Pragmatism is based on a relational epistemology, a non-singular reality ontology, and a value-laden axiology (Kivunja & Kuyini, 2017). A relational epistemology assumes that "relationships in research are best determined by what the researcher deems appropriate to that particular study" (Kivunja & Kuyini, 2017, p.35). A non-singular reality ontology implies that "there is no single reality and all individual have their own and unique interpretations of reality" (Kivunja & Kuyini, 2017, p.35). Last, a value-laden axiology implies that the researcher is conducting a study where the ultimate purpose is to benefit people (Kivunja & Kuyini, 2017). These principles guided the creation of the survey and interview questions, informed the principal investigator how to direct probing questions during participant interviews, and formed the backbone for data analysis. Pragmatism is well known as a theoretical foundation, it helps to implement research into practice (Battaglia & Glasgow, 2018; Finnegan & Polivka, 2018), and it will increase the real-world applications of the results of this study.

Sampling. Purposeful maximum variation sampling was used to select participants across Ontario, the second largest but most populated province of Canada. Participants held a current or recent (within 6 months) ED management position at a hospital and were included if able to commit to completing the survey and the 60-minute interview. Purposeful maximum

variation sampling intends to document "unique or diverse variations that have emerged in adapting to different conditions, and to identify important common patterns that cut across variations" (Palinkas et al., 2015, p. 534). The application of maximum variation sampling decreases the risk of selection bias (Malone et al., 2014) by ensuring that the sample is as close to an accurate representation of the population of ED managers as possible. Variety of this type encourages a "holistic understanding" (p. 67) of a phenomenon and brings value to qualitative research (Suri, 2011).

Each hospital in Canada can be placed into four categories based on population density: large urban population centres (population > 100, 000), medium population centres (30, 000 - 99, 999), small population centres (1, 000 - 29, 999) and rural areas which include all areas living outside of the other three (Statistics Canada, 2017b). All of Canada's population fits into one of these four categories. The size of population centre containing the hospital that the participant worked at was determined by the 2016 Statistics Canada Population Centre and Rural Area Classification document (Statistics Canada, 2017c). Hospitals were chosen from these four categories and from a variety of geographic locations to maximize variation. Only one hospital was chosen from each population density area and it required an emergency department to be associated with the hospital. In order to reduce selection bias, no managers were contacted where there was any existing relationship with the primary investigator.

Vasileiou, Barnett, Thorpe and Young (2018) strongly advise against blindly following numbered guidelines and instead to consider the context of the study to determine sample sizes. Robinson (2014) suggests estimating an expected range of participants. According to these recommendations, a range of two to three participants for each of the four size categories of hospitals were selected in order to allow for the collected data to be rich and detailed without

overloading the novice researcher with information. The purpose of the study is not to have statistically generalizable results to apply to the entire country, but to explore the barriers faced by a variety of ED managers from different sized hospitals in the province of Ontario. For this reason, the size of the sample did not need to move beyond a maximum of four managers (n=16) for each category.

To achieve a minimum of two managers (n=8) for each population density category, 16 managers were contacted for participation using publicly available information and the hospital switchboard directories. Two additional managers were contacted when interviews failed to be completed by participants. This study was approved by the Athabasca University Research Ethics Board prior to any contact with participants, and each manager signed a letter of informed consent before participation.

Study design. A mixed methods design using complimentary quantitative and qualitative components was used in order to deepen the understanding of the real-world barriers that prevent implementation of interventions. The quantitative portion answered the 'when' and 'how much', and the qualitative portion answered the 'why', 'how' and 'what' (Neergaard, Olesen, Andersen, & Sondergaard, 2009). Nowell Norris, White, and Moules (2017) argue that in order to have a study that academics regard as attention-worthy, the study must be trustworthy. In order to ensure credibility and therefore trustworthiness of results, the primary investigator had prolonged engagement with the subject matter and participants and had regular debriefing with supervisors to ensure the reader finds the conclusions and experiences as recognizable.

A short quantitative descriptive survey (Appendix E) using Lime Survey (a secure online statistical web application) was designed using recommendations in Leggett (2017) to ensure

credibility of answers. Participants answered four questions regarding age, gender, background, and length of tenure, 13 five-point Likert scale questions, and four scale questions ranging from one to ten. In order to give managers the opportunity to explain their answers, free text options were available on the survey in addition to giving the participant the opportunity to discuss survey answers during the interview.

A semi-structured qualitative descriptive interview was designed (Appendix F), consisting of two open-ended introductory questions, followed by two scenarios, and concluding with two open-ended reflection questions. Qualitative descriptive studies produce findings that have rich descriptions and the results of these studies increase the depth of knowledge about clinical situations as well as the participant's experiences (Magilvy & Thomas, 2009). The semi-structured format allows the same general information to be collected while simultaneously ensuring full expression of the participant's viewpoints and decreasing researcher bias (Turner, 2010).

A pilot study was conducted in order to decrease measurement bias as recommended by Malone, Nicholl, & Tracey (2014) and Turner (2010). The pilot was successfully used to iron out design and process difficulties. Results from the pilot survey and interview were not used in data analysis. In order to minimize the influence of an unequal power dynamic between interviewer and participant, collaborate interviewing strategies were used as suggested by Creswell and Poth (2018). It was also recommended by Creswell and Poth (2018) to maintain a reflexive journal to prevent the introduction of bias from reflexivity. Both a reflexive and methodological journal were consistently used throughout data collection and analysis. A clear audit trail such as this also increases dependability and confirmability of the study (Nowell et al., 2017).

Data analysis. Quantitative data from the survey was entered manually into the IBM SPSS Statistics Version 25 program and descriptive and frequency statistics were calculated.

Qualitative data from the interviews was analyzed using the 6-phase model of thematic analysis proposed by Braun and Clarke (2006) (Appendix F). This method is ideal for a novice researcher (Braun & Clarke, 2006) and is still relevant in current nursing research (Nowell et al., 2017). This model was used in a non-linear fashion, as qualitative data analysis is best done iteratively (Nowell et al., 2017). Data analysis was conducted concurrently with data collection. Thematic analysis can examine "the perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights" (Nowell et al., 2017, p. 2), which aligns with the objectives of this study. This method is also successful at allowing a researcher to develop a more nuanced understanding of the underlying complexities of a phenomenon by understanding the perceptions, values, and beliefs of participants (Glesne, 2016). Additionally, this method is not tied to one particular theoretical framework (Braun & Clarke, 2006), and thus supports the pragmatic paradigm**.**

The similarities and differences found in the managers responses derive their significance from the heterogeneity of the sample (Palinkas et al., 2015), which aligns with the pragmatic theoretical framework of the study and increases real-world application of results. Palinkas and colleagues (2015) state while purposeful sampling examines both similarities and differences, the emphasis of analysis should be rooted in differences since the sample selection process is rooted in maximizing variation. Emphasis on these differences in analysis minimized potential limitations of this study.

Data saturation is defined by Creswell and Poth (2018) as the point where no new categories emerge during data analysis and is often demarcated as the point in time when the

researcher should stop collecting data. Considering the non-singular reality ontology of the pragmatic theoretical framework (implying each manager will bring their own unique perspective), data saturation was not strived for. Data collection was stopped when each of the four population density categories had a minimum of two participants.

In order to protect the privacy and confidentiality of participants, the managers are referred to by the gender-neutral third person pronoun “they”, “them”, and “their” in the following results and discussions.

Results

Participant characteristics. Out of the 18 ED managers contacted, a total of nine (n=9) participants completed both the survey and the interview and were included in data analysis. Three managers did not return phone calls after multiple attempts, two managers contact was obtained but they declined to participate due to time constraints, two managers did not return emails after the letter of information was sent, and the remaining two managers completed the survey but not the interviews and thus were not included in data analysis. One manager with more than ten years ED management experience had left their ED position less than six months ago, but the interview was rich in information and therefore this participant was included in data analysis and the inclusion criteria was adjusted.

Every population centre category had two participants (22%) except the medium population centre category had three (34%). Just under half of participants identified as female (44%) and the others identified as male (56%). Most managers were younger, with three participants between 31-40 years (33%) and four between 41-50 years (45%). Only two managers were older than 51. All managers had a nursing healthcare background, and most managers (78%) had less than 5 years of experience as ED manager.

Table 1

Demographic and characteristics of participants (n=9)

Characteristics	*n* (%)	*M* (SD)
Population centre category		
Large urban centre	2 (22)	-
Medium population centre	3 (34)	-
Small population centre	2 (22)	-
Rural area	2 (22)	-
Gender of participant		
Female	4 (44)	-
Male	5 (56)	-
Age group (years)		
31 - 40	3 (33)	-
41 - 50	4 (45)	-
51 - 60	1 (11)	-
Greater than 60	1 (11)	-
Healthcare background		
Nursing	9 (100)	-
Years in emergency management position		
Less than 5	7 (78)	-
6 - 10	1 (11)	-
11 - 15	1 (11)	-
Duration of interview (minutes)	-	52 (10)

Notes: Dashes not applicable

Quantitative synthesis. Participants spent on average five minutes completing the online survey. Table 2 below summarizes results. Participants demonstrated a strong knowledge of the known correlation between nursing job satisfaction and patient safety, nursing staff turnover, absenteeism, and nursing health, with all nine participants either strongly agreeing or agreeing with these correlational statements. All nine participants strongly agreed that job satisfaction is correlated with staff absenteeism.

Questions regarding measurement of job satisfaction produced the most variation amongst participant responses. Many responded that they neither agree nor disagree that measurement tools exist (33%), that accurate tools exist (45%), and that cost-effective tools exist (78%). One participant disagreed that job satisfaction measurement tools exist and that cost-effective tools exist, and two participants disagreed that accurate tools exist (22%).

Questions regarding the implementation of interventions produced unanimous results indicating that managers believe that job satisfaction interventions, including cost effective ones, exist. Only one participant indicated they neither agreed nor disagreed that cost effective interventions exist.

Participants also unanimously agreed that job satisfaction, job satisfaction measurement, and job satisfaction interventions are important in the ED, with all participants either agreeing or strongly agreeing with this statement. Participants were asked to rank importance of issues in the ED with 1= least important issue and 10 = most important issue requiring immediate attention. Managers ranked the importance of addressing job satisfaction (M=9.22) and creating job satisfaction interventions (M=9.33) as utmost important requiring almost immediate attention. Whereas measuring job satisfaction (M=8.00) remained important but less urgent than the former.

There existed variability in participant responses when asking if the organization believe job satisfaction to be an important issue in the ED. Two participants (22%) strongly agreed, five (56%) agreed, one neither agreed nor disagreed, and one disagreed. This was reflected in the ranking questions where participants indicated that the organization places less importance and immediacy on the issue of job satisfaction (M=7.78) than the managers do (M=9.22).

Table 2

Frequency and characteristics of participant survey answers (n=9)

Characteristics	*n* (%)	*M* (SD)
JS affects patient safety		
Strongly agree	7 (78)	-
Agree	2 (22)	-
JS affects nursing staff turnover		
Strongly agree	8 (89)	-
Agree	1 (11)	-
JS affects nursing absenteeism	9 (100)	-
JS affects health of nurses		
Strongly agree	8 (89)	-
Agree	1 (11)	-
JS measurement tools exist		
Agree	5 (56)	-
Neither agree nor disagree	3 (33)	-
Disagree	1 (11)	-
Accurate JS measurement tools exist		
Agree	3 (33)	-
Neither agree nor disagree	4 (45)	-
Disagree	2 (22)	-
Cost effective JS measurement tools exist		
Agree	1 (11)	-
Neither agree nor disagree	7 (78)	-
Disagree	1 (11)	-
JS interventions exist		
Strongly agree	3 (33)	-
Agree	6 (67)	-
Cost effective JS interventions exist		
Strongly agree	2 (22)	-
Agree	6 (67)	-
Neither agree nor disagree	1 (11)	-
JS is an important issue to address in ED		
Strongly agree	7 (78)	-
Agree	2 (22)	-

JS measurement in ED nurses is important		
Strongly agree	5 (56)	-
Agree	4 (44)	-
JS interventions in the ED are important		
Strongly agree	6 (67)	-
Agree	3 (33)	-
Organization believes JS is important in ED		
Strongly agree	2 (22)	-
Agree	5 (56)	-
Neither agree nor disagree	1 (11)	-
Disagree	1 (11)	-
Rank importance (least important issue =1, most important and requires action =10)		
of addressing JS	-	9.22 (0.97)
of measuring JS	-	8.00 (1.58)
of creating JS interventions	-	9.33 (0.87)
of JS to the organization	-	7.78 (1.48)

Notes: Dashes not applicable
JS = job satisfaction
ED = emergency department

Thematic synthesis. Interviews averaged 52 minutes with no interruptions truncating the conversations. Three main themes emerged through analysis of the interviews: lack of control, lack of time, and lack of tools. The themes highlighted the differences in barriers faced by managers in organizations of various sizes. Table 3 summarizes findings and is followed by a discussion.

Table 3

Barriers to implementing job satisfaction interventions

A lack of control…
a) In smaller and more isolated areas: ▪ Over community infrastructure ▪ Over the respect for and understanding of the nursing profession from the community ▪ Over referrals and transportation to external hospitals for specialty services ▪ Over the natural environment b) In larger and more populated areas: ▪ Over admitted patients remaining in the ED ▪ Over violence and abuse of patients and family members towards ED nurses
A lack of time…
▪ Due to attention to time-defined high priority emerging issues, whereas job satisfaction is a lower priority a) In smaller and more isolated areas: ▪ Due to time-consuming recruitment process ▪ Due to managing multiple departments ▪ Due to time-consuming accreditation and writing of protocols and procedures b) In larger and more populated areas: ▪ Due to the large numbers of nursing staff requiring different interventions based on diverse generational needs ▪ Due to time-consuming nature of large hospital policies and procedures
A lack of tools.
▪ Measurement tools and evidence-based interventions are not easily accessible ▪ Existing HR satisfaction surveys do not provide useful or useable results ▪ Small number of staff in smaller hospitals skew satisfaction survey results ▪ Managers have no communication platform to enhance sharing of job satisfaction intervention ideas

Lack of control. Managers discussed that many factors influencing job satisfaction were those which had a locus of control outside their ability to influence. Managers felt these factors acted as a barrier to increasing job satisfaction because they felt powerless to change them. Issues that were out of the control of managers from smaller and more isolated hospitals included a lack of infrastructure, a lack of respect from the community, lack of understanding of the nursing profession, and a lack of control over external organizations, transport services, and the natural environment. For larger hospitals in more densely populated areas, managers reported that the increasing number of admissions in the department, an increasing frequency of violence and abuse from patients and family members, and procedural barriers from the organization were factors that they had little to no control over that influenced job satisfaction and impeded them from implementing interventions to increase job satisfaction.

Smaller and more isolated areas.

Community infrastructure. One manager of a multisite organization stated "*a lot of times, because the towns are small… they don't have the infrastructure for people to find sufficient work and housing is an issue up here too. So even when we can recruit new grads to grow our own, sometimes we have trouble finding housing for them"* (Participant 5TD2). Two other managers cited a lack of daycare availability and a lack of adequate education for children (due to understaffed schools) as major barriers to increasing job satisfaction of ED staff with families and keeping them in the community. The lack of adequate schools also influenced the ability to recruit homegrown nurses, as there was a decreased likelihood for students to be able to get into nursing school without proper education. This increased the reliance on externally recruited nurses who did not have existing ties to the community and who were less likely to stay for long periods of time. One rural hospital manager commented that even when housing was

obtained and was provided to nurses, it was difficult to find reliable staff in the community that would look after the property. The upkeep of the housing influenced nurses' desire to stay in the community and continue working in the hospital.

Respect for and understanding of the nursing profession from the community. Another barrier that managers perceived to be out of their control that influenced job satisfaction of their nurses was how members of the community perceived nurses. One manager reported that in the community, "*nurses aren't respected the way we used to be"* (Participant B5UW). The manager stated that patients expected nurses to be "*subservient to the community"* versus just *"doing their job*" (Participant B5UW), indicating a disconnect between expectations and reality of care provided in the hospital. This attitude influences the way that patients treat nurses and the manager stated this attitude decreased the job satisfaction of nurses significantly.

External hospitals and transportation services. Another area where managers reported a lack of control is the reliance of smaller and more isolated hospitals on external organizations and transportation services. Smaller hospitals very frequently have to transfer patients to other facilities due to lack of specialty services or lack of equipment (e.g., CT/MRI scanners), and the time waiting for transfers can drastically increase workload and stress for ED nurses. One manager described waiting for an evacuation of a mental health patient for four days and having to resort to using housekeeping staff as constant observers due to lack of available nursing resources. When there is one RN in charge of the whole hospital including the ED, the manager stated, having a patient who required one-to-one patient in the department for a few days dramatically changes the staffing needs of the hospital. These staffing needs are frequently unable to be filled due to a lack of available staff in the community.

Natural environment. Smaller and more isolated hospitals often face frequent environmental challenges including ice break up, flooding, and inclement weather conditions influencing the functioning of the facility. These factors can acutely change the staffing needs of the hospital and are largely unpredictable. Nurses that are present in the community are heavily relied on, and one manager reported that nurses are frequently called in to help (even after having just finishing a shift) at undefined times. These nurses often come in to help the hospital out of obligation to the team and to the community. The manager stated that over time this has created a poor quality of life for nurses and significantly decreased nursing satisfaction. Nurses feel they cannot make plans due to the feelings of guilt associated with not being present in the community when the unexpected needs arise. These feelings of guilt and decreased quality of life influence job satisfaction and act as barriers to implementing interventions due to perceived lack of control.

Larger and more populated areas.

Admitted patients remaining in the ED. One manager explained that an increase in the number of admitted patients staying in the ED who have no assigned bed on other units (due to capacity issues in the rest of the hospital) results in a decreased number of beds available for emergency patients. A decreased number of beds decreases patient flow in the department causing increased wait times, higher volumes of patients in waiting rooms, and increased stress on staff due to decreased ability to provide safe and timely care. Managers of these larger centres expressed frustration with this issue as it was a significant barrier to being able to influence the job satisfaction of nursing staff, yet they had no control over the availability of bed space on the floors accepting patients. One manager stated that admitted patients in the ED act as a double-sided cause of dissatisfaction for ED nurses. They perceive that nurses choose to work in the ED

for the emergency patient population, and the increasing number of admissions are changing the type of nursing care they are providing. Another manager stated admitted patients in the ED are a cause of dissatisfaction to the nurses because these admitted patients require nurses to have an increased scope of practice. Admitted patients require procedures to be done in the ED (due to urgency and lack of space) that would under normal circumstances be done in specialty areas in the hospital. The widened scope of practice causes stress due to nurses being required to practice outside of normal scope without specialty training and it also increases concerns regarding providing safe patient care.

Violence and abuse. Although this was also felt by managers in smaller hospitals, due to the sheer number of people coming through the doors of larger EDs, the issue of violence and abuse was emphasized more by managers of these larger centres. Managers reported an increasing frequency and intensity of violence and aggression towards nurses from both patients and family members, and the effects of this can be seen in a decrease in satisfaction of the ED nurses. This sentiment was echoed by every manager of large and medium populated centres, and one manager remarked this was clearly represented in their data showing increasing numbers of incident reports filed by staff.

Managers of medium sized population centres especially reported frustration from a lack of control over being able to provide staff with infrastructure needed to assist patients who were violent or those with mental health issues needing isolation due to safety concerns. Managers stated that these infrastructure and staffing changes, which could be achieved by adding more isolation rooms or around the clock security personnel, were not seen as priorities by the organization's administrators due to the large monetary investment required to make these changes. One manager, who had just recently left the ED management position at a large centre,

cited that this cycle of trying to advocate for staff repeatedly regarding these types of large systemic issues and receiving no supportive action from the administrators of the institution contributed in part to them leaving the manager position. This lack of control over these factors therefore risks not only the job satisfaction of ED nurses but also the satisfaction of ED leaders.

Lack of time. All managers expressed at some point in the interview that they had limited time and that being constantly busy was a part of their everyday work life. Managers reported across the board that time is a necessary part of being able to influence job satisfaction: from spending time in the department to understand the dynamics and needs of the ED and staff, to finding or creating interventions to influence the areas in need of improvements, to dealing with unintended consequences of making changes in the department, and to following up with interventions and assessing their effectiveness. All managers determined the amount of time and attention they gave to issues is based on the priority of the issue. High priority issues require their immediate attention and take precedence over lower priority issues. Many managers reported feeling like the highest priority items that took up the most of their time consisted of the urgent issues in the department and the time-defined priorities dictated by the organizational administrators. Examples of urgent issues requiring the manager's immediate attention included attending a triage nurse who was assaulted by a patient, addressing unfilled gaps in the schedule due to nursing staff sick calls, and addressing performance issues of nursing staff such as documentation errors and bullying incidences. Examples of time-defined priorities set by organizational administrators included implementation of electronic documentation. One manager stated "*it's overwhelming sometimes, the sheer volume of [tasks]… you can get really stuck in really just trying to put out the fire that's in front of you and not manage something that's sort of smoldering off to the side"*(Participant JFH6). No manager reported that job

satisfaction initiatives had any sort of time-defined plan associated with them, and managers reported that although the organizational leaders placed value on the idea of job satisfaction, this value was not translated into a high time-sensitive priority.

The reasons why a lack of time acted as a barrier to increasing job satisfaction varied greatly across sizes of hospitals. For smaller more isolated hospitals, managers reported that the factors that were taking away from being able to address job satisfaction included time spent recruiting staff, time spent acting as manager of multiple departments, and time spent on policy writing and accreditation. Larger and more populated areas demanded more time from managers due to large numbers of staff and to the implementation of time-consuming organizational policies and procedures.

Smaller more isolated areas.

Recruitment. Smaller and more isolated ED managers reported a large amount of their time each week was spent on recruiting staff. One manager reported spending three to five hours per week merely on phone interviews for nursing recruitment, something they described as a consistent investment with a very low yield. Smaller hospitals also have a smaller pool to draw from when trying to promote working in the ED, drawing staff from other departments within the hospital. One manager pointed out that there exists an additional layer of complexity when externally recruiting an ED nurse to a smaller hospital because the nurse needs to uproot their lives. This makes it a bigger decision than merely changing hospitals in a larger population centre, and often requires more time investment from the manager connecting the new hire to resources in the community. The relocation also increases the risk of the employee's commitment falling through. Managers reported many instances where personnel were hired and either never showed up or resigned shortly before starting the assignment. These circumstances

left not only the hospital short staffed but also required additional investment of time and money from the manager to fill this now empty spot for the hospital.

Managing multiple departments. Managers of smaller and more isolated hospitals were also more likely to be in charge of multiple departments, or even the entire hospital (in rural locations). Managers described this as very time-consuming, requiring them to *"wear many hats"* (Participant 05LC) and perform many duties outside of managing only the ED, which requires additional layers of priority management. One manager stated that their frequent absences from the department (either going to one site or attending meetings outside the hospital) caused the nurses increased stress as there was no second layer of leadership for staff to rely on. One manager described the huge risks inherent to having only one layer of leadership at the hospital by stating "*if something happened to me, and I got hit by a bus tomorrow, there's nobody here who can just walk in and carry on"* (Participant 2JIW). Since a leader in such a situation is the only person that holds a distinct leadership position at the hospital, this places a lot of responsibility on that one person and places a high risk not only on the staff, but also to the residents of that town relying on that hospital for care.

Protocols, policies and accreditation. One manager (in charge of the whole hospital) expressed their frustration regarding the amount of time that they had to spend on accreditation for long term care, citing that they are "*plagued"* (Participant 2JIW) with this process that fills an entire full-time position worth of time. The time they were able to dedicate to creating and implementing interventions to increase job satisfaction of ED staff was therefore close to non-existent during that particular accreditation period. Another barrier identified by managers was the time required to write new policies and protocols for their ED. These policies and protocols were identified by managers to contribute to a better work environment for nurses but required

too much time and resources to develop and implement compared to the gains they provided. One manager described almost half a year on one order set for the ED for an occurrence that was likely to happen only once per year, which made them question the prioritization or this protocol.

Larger more populated areas.

Large numbers of nursing staff. Larger hospital managers also reported a lack of time to be able to spend on creating interventions to increase job satisfaction of their ED staff, due to the size of the department and the large number of staff they are responsible for. Managers felt like they were not able to dedicate enough time to being present in the department or to getting to know the diverse needs of their staff. With increasing staff numbers, the issue of generational differences was brought up by a few managers. Although one manager of a rural hospital commented on a lack of self-direction of some younger nurses, these issues were amplified in larger hospitals due to the number of staff members. One manager reported that a number of younger nurses were less resilient, had fewer coping strategies, and had expressed a different sense of accountability when compared to their older nurse counterparts. Two other managers merely mentioned that the younger generation had very different needs compared to older nurses, citing specifically that the younger generation expressed an increased need for work-life balance. Three managers of larger centres stated that the older nurses were more resistant to any kind of change in the department, especially large-scale changes. One manager stated that they felt as though they needed to create different job satisfaction interventions for nurses of different generations because their needs were so vastly different. The consideration of the differences in staff needs requires a huge investment of time and can increase the complexity of creating interventions intending to influence job satisfaction of ED nurses.

Policy and procedure. Although both larger and smaller hospitals reported that any change takes a long time, this timeline was accentuated by manager or larger hospitals due to the layers of bureaucracy that exist in larger centres. Due to the many layers of approvals and the quickly changing environments described by the ED managers, this time delay can influence implementation of interventions.

Lack of tools. Managers described that a large barrier to increasing job satisfaction was the lack of available, accurate, cost-effective tools for measuring job satisfaction and for implementing interventions to increase job satisfaction. There were less remarkable patterns of difference between larger and smaller centres regarding the lack of tools. This topic shared more similarities, but each hospital was distinct in their particular needs to overcoming this barrier.

All nine managers stated their organization had some variation of worker satisfaction survey that was distributed to staff ranging from every 1-3 years. Surveys were implemented either by human resources (HR) department or by an external organization. Even though hospitals put a lot of time, money, and good intention into implementing these surveys, all managers reported that these surveys came up short in relation to producing useful and useable results. Some managers viewed results of these surveys to be mild indicators of the direction that the department could concentrate on, but most viewed the gains as marginal at best. Managers described these surveys as too generic, not providing real-time information, not specific enough to the ED, too closed-ended, and as unable to provide information that could be used for real change in the department, especially concerning job satisfaction. Additionally, one manager noted that when too many surveys are distributed to staff, survey fatigue can influence the reliability of survey results.

One manager of a large centre described their experience of having an external organization come in to measure and implement an intervention intending to influence the job satisfaction of their ED staff. The intention of the consulting organization to optimize the scheduling were good, as this was too large of a project for the ED manager to take on. However, the external consulting organization lacked transparency of their process and failed to communicate adequately with staff or listen to the advocating ED leaders regarding proposed changes. The resulting schedule contained flaws that exacerbated the job dissatisfaction of the department. There were unfilled holes in the schedule, meaning nurses had to work short-staffed. Additionally, the new schedule resulted in a reorganization of shift lines, meaning that certain groups of nurses who had worked together for 15 or more years and developed strong relationships, were no longer working the same shifts. All of these factors in the new schedule resulted in more nurses leaving the organization due to dissatisfaction.

A few managers from both large and small centres who had high staff turnover, stated that novice staff potentially skewed the results of the surveys due to the short amount of time that they had been in the department. One manager reported having as much as 36% novice staff and even though they were only in the ED for a short time (a few months) they were expected to report on the state of the department in the last two years. In that manager's opinion this resulted in inaccurate survey results.

Some managers from both large and small organizations made explicit that at times, what staff say they want is not always what managers think they need. There were certain issues, for example workplace bullying, clique mentality, and performance issues, that managers recognized as important influencers of job satisfaction, but these issues were less likely to be reflected in staff satisfaction surveys. Managers stressed the importance of having staff involved in the

process of identifying areas where job satisfaction could be improved, but not allowing this to overshadow the importance of the system perspective brought by leaders of the department.

Most managers, from both larger and smaller centres reported relying on their nursing background and using their intuition and communication skills to feel the pulse and morale of the department. Managers reported that they are able to *"…just know or feel it"* (Participant CK20), stating *"it's one of those palpable things"* (Participant WK80). There was an implied sentiment that they did not need a tool to tell them this information. One manager was particularly incensed by the idea of an external organization measuring the job satisfaction of the nursing staff stating… "*I don't need an organization to let me know that my staff [is] not thrilled"* (Participant B5UW).

There was a general sentiment that it took too much time to research evidence-based measurement tools and interventions to influence job satisfaction and that these resources were not readily available. One manager cited that their organization required evidence-based research to back up interventions the managers intend to implement, but this was not possible for the manager due the amount of time required to sift through the research. The knowledge and perceived importance of job satisfaction was therefore present, but the lack of time to find appropriate resources proved to be the barrier in this situation.

Managers also noted the importance of being able to act on information when it is collected. One manager stated, "*if someone asks me for my opinion, but doesn't do anything about it, then I get even more frustrated than I was at the beginning"* (Participant 05LC). Although all nine managers reported that their organization implemented surveys, only one manager from a medium sized centre reported an action plan was developed based on survey information.

Most managers lamented the fact that they did not have any efficient means of communicating with other ED managers and no effective communication platform to exchange and discuss ideas surrounding the issue of job satisfaction and the ED work environment. Many managers asked the principal interviewer what issues other ED managers were experiencing and what solutions were being implemented successfully in their department.

Although there were many similarities across hospitals and each hospital had unique issues and difficulties, there were some notable barriers pertaining to smaller hospitals. Managers in smaller and more isolated hospitals reported that the smaller numbers of staff completing worker satisfaction surveys inaccurately skewed the results. Many managers mentioned the ubiquitous 'bad egg' worker who had an unwavering negative attitude that could negatively influence survey results more than in a centre where more voices were heard. One manager described their experience of receiving results from a HR implemented survey indicating how highly satisfied their staff was, yet this was completely opposite of their sense of the current sentiment in the department. In that manager's opinion, this disagreement reflected inability of the tool to measure accurately and in real time the satisfaction of their nurses. On the other hand, many of the other smaller hospital managers reported that the answers were predictable from the surveys and were therefore a waste of resources.

Commonalities that need to be explored further. As this study focused on the differences regarding barriers various sizes of hospitals face, no conclusions can be made regarding similarities that reached across hospital sizes. However, it is important to make note of the similarities in order that they may be explored further in research and in practice.

Worsening ED environment. Every manager stated that the ED environment has been getting worse over the past years. Managers across the board reported increasing volumes,

increasing violence associated with psychological and physical harm to nurses, increasing workload, and a rapidly changing ED clientele. Regardless of perceived changes, this is not a new issue. One manager stated "*I don't know why we haven't figured out yet how to keep nurses happy, and I don't understand why it's not straight forward. We all know that nurses struggle, and money is not the answer.*" (Participant B5UW). Managers also expressed concerns about the large amount of risk held in EDs, by all stakeholders including patients, staff, and leaders. In large centres, managers reported that EDs are required to do more with same resources, and that the risk is not being distributed across the hospital units. One manager who is now managing an inpatient unit, stated that the effects of the struggling ED could not be felt on the floor, indicating a lack of risk distribution. Nurses in all hospitals are frustrated. One manager commented that nurses "*… can't do the job that they want to be able to do because they don't have the resources to be able to provide the level of care that they know and want to be able to deliver"* (Participant CK20).

Daily communication with staff. Daily rounding or group huddles with staff were perceived by all hospital sizes to improve communication and enhance the managers ability to assess and influence job satisfaction. Managers perceived this daily communication as a tool to increase the ability to gauge morale of the department and increase their ability to implement interventions related to job satisfaction. One ED included regular rounding by impartial leadership from outside the department, which promoted disclosure of issues that staff were not able to share with the manager directly and increased the manager's ability to address a wider range of issues of regarding job satisfaction.

Discussion

Every participant, except for one, made a point to express the high level of importance that job satisfaction has in their department, which was also reflected in survey results. Discussions with participants regarding the topic were largely very dynamic and participants were well-informed. Many managers stated that they went out of their way to participate in this study because they believed in the importance of the topic and wanted to contribute to building collective knowledge about the issue. One manager mentioned that she didn't even have enough time to go to the bathroom but made time for this 60-minute interview because there was such a need for research in this area and wanted to be able to contribute in any way possible. Many managers also expressed their gratitude for being able to explain their answers to the survey questions, reflecting the complexity of the issue and supporting the mixed methods research approach of this study.

It is necessary to mention the influence of the principal investigator on the results of the study. It is impossible to completely remove the influence a researcher has on a study's results, but there is a benefit to being both an insider and an outsider (Dwyer & Buckle, 2009). Disclosing at the start of the interview that the investigator is an ED nurse in a large urban centre while also having experience in smaller rural EDs enabled the participants to understand the investigator as a member of their group (an insider) and use language they knew the researcher would understand. By not being a manger, the outsider perspective was also captured by the investigator. This combination of being the insider-outsider decreased the risk of othering the participants and promoted thorough discussions (Dwyer & Buckle, 2009).

Overall, both methods of data collection revealed that managers had a high level of knowledge regarding job satisfaction, and they understood the benefits of high job satisfaction

and the detriments of low job satisfaction in their departments. Organizations also had a high level of knowledge of the topic, as reflected by the responses in the survey and also by the disclosure by participants in interviews that each hospital had some version of a satisfaction survey that was implemented by the organization on a regular basis. What the data found lacking, however, was concrete easy to use and cost-effective ways of measuring job satisfaction, of interventions that were known to influence job satisfaction and also how to measure the impact and success of these interventions. It was clear that this was a source of frustration for managers, as the desire to do something was present but the tools to do it were not. It was also clear that many managers were stuck in a self-perpetuating feedback loop within the barriers preventing them from influencing job satisfaction of their emergency nurses.

Why barriers can create self-perpetuating feedback loops. Lack of control, lack of time, and lack of tools have the potential not only to act individually as barriers preventing managers from influencing job satisfaction, but they can also act synergistically and create self-perpetuating feedback loops that are difficult to break out of. Self-perpetuating feedback loops need to be broken in order to prevent issues from perpetually worsening.

Across most hospitals, managers reported that there were often not enough staff to fill vacant positions in the ED. Many describe not only a shortage of nurses, but a shortage of nurses trained in the ED specialty. This can be an issue for managers as it is very expensive to educate an ED nurse. One manager reported spending *"roughly around $10,000 [CDN] per person to train"* and due to the high turnover rate in their department, they reported spending "*almost over $400,000 [CDN] in the last two years"* (Participant WK80). Another manager explained that new staff were not only expensive to educate, but they also increased stress of more experienced RNs especially in the ED where trust in team members is integral to the functioning of the

department. The reason for nursing shortages and resulting feedback loops are very different depending on hospital size.

For larger and more populated hospitals, nurses have other opportunities to move to other nursing jobs in the same location and not having to uproot to move for the job. Managers of larger centres reported nurses leaving the ED for areas where they perceived to have less stress and shoulder less risk for the same amount of pay. Another manager stated that the size of the organization contributed to less of a community feeling, therefore less organizational commitment, and because the turnover was so rapid, no project could be implemented to try to increase this commitment. One large organization found itself in a situation where they had a lack of trained nurses to fill all of the shifts needed to run the department. This resulted in shift vacancies that needed to be either left open, leading to nurses working with increased patient ratios, or fill the vacancies with nurses working overtime hours, which means nurses would be paid extra to come in to work more than full time hours. The organization's administrators chose to keep these shifts unfilled due to the high cost associated with paying nursing staff for overtime, which resulted in staff working short-handed, which in turn resulted in very high dissatisfaction from nurses due to inability to provide safe care for their patients. It did not surprise the manager that this situation resulted in a large number of nurses seeking work elsewhere. This mass exodus from the department exacerbated the problem of unfilled shifts. Unfilled shifts result in increased psychological and physical stress on nurses, increased risk due to unsafe patient nurse ratios, increased violence and safety incidents, decreasing breaks and influencing work life balance, decreasing job satisfaction for nurses therefore creating more holes in the schedule. Time and money are required to hire and train new nurses further creating

problems for managers trying to influence the job satisfaction of their staff, perpetuating the job dissatisfaction and creating a very difficult feedback loop.

In smaller and more isolated areas, the community plays a larger part in perpetuating nursing shortage. Managers report that the lack of infrastructure, the isolation, the requirement to practice in an extended scope all deter nurses from uprooting their lives and moving to these communities. In addition to this, lack of education system results in an inability to create home-grown nurses, which is accentuated by the lack of respect given to new nurses in the community. If nurses have to be recruited externally, they are also less likely to have the ties that keep them connected to the community long enough to develop this respect from the community. This in addition to the lack of trained nurses in addition to the time and money required by the manager to recruit the nurses creates less time to focus on the department which in turn accentuates the nursing shortage problem.

Although the reasons for the shortages are different for the size of the hospitals, it is clear that these issues act together to create a difficult hole to climb out of. There is a large need for creative and innovative cost and time-efficient solutions to overcome these barriers and get out of these feedback loops. There is a need for more evidence to support how to overcome these barriers, but the following discussion stemming from information retrieved from discussions with ED managers in this study provides a basis from where to start. Table 4 summarizes recommendations for overcoming barriers to increasing job satisfaction based on data from this study, which is followed by a discussion.

Table 4

Recommendations for overcoming barriers to increasing job satisfaction

Lack of control
▪ Academic research and the political community need to examine the systemic nature of control barriers a) In smaller and more isolated areas: ▪ Effective communication with the community about nursing roles and care expectations b) In larger and more populated areas: ▪ Effective communication within and between departments ▪ Cross-train nurses in other departments
Lack of time
▪ Define a timeline for job satisfaction interventions to increase priority a) In smaller and more isolated areas: ▪ Invest in external recruitment agency ▪ Collaborate with larger hospitals for policies and procedures b) In larger and more populated areas: ▪ Appoint a staff member whose role is to focus on improving work environment and satisfaction ▪ Provide resiliency training in nursing curriculum to benefit new graduate nurses ▪ Streamline policy and procedure process to increase efficiency and speed up translation into practice
Lack of tools
▪ Redesign existing satisfaction surveys to be ED-specific ▪ Need to include staff in job satisfaction intervention design and implementation process ▪ In smaller hospitals focus on the dialogue created from surveys not the numbers ▪ Managers need a communication platform to share their ideas and speed up knowledge translation into practice

Overcoming a lack of control. Lack of control is one of the most difficult barriers to overcome as the inability to manipulate these factors is inherent to what makes them a barrier. This is where creative solutions have to come into place and where research needs to find larger systemic solutions. Especially with things that cannot be controlled, communication is essential in making the needs of the department known and hopefully this will promote external action and change.

For smaller and more isolated communities, effective communication with the community is essential. If possible, the community needs to understand the causal mechanism of a lack of nurses and understand how their actions result in consequences that they will feel as users of the healthcare system. For example, if housing is not provided or maintained properly with help from support staff in the community, the nurses will not feel comfortable in the area and have less incentive to stay and work, which decreases the ability for them to provide the care that he community needs. Similarly, with the respect shown to nurses in communities, if there is a way to create connections between community members and nurses, this might promote trust and foster relationships and has the potential to increase respect and trust, which takes a long time to develop.

For larger hospitals and more populated areas, it is essential that there is effective communication between departments. Some managers reported that cross-training nurses where possible is a way to create an understanding and empathy of difficulties faced by other units. When cross-training is not possible, providing opportunities for both nurses and leaders to physically be in different departments to get to know their unique processes might provide insight and show how pitfalls in patient flow influences various departments. The distribution of risk among all units is vital if ED work environments are going to improve.

Overcoming a lack of time. Even though this barrier is technically manipulatable, overcoming it is more complicated than simply providing managers with more time, which they already have so little of. Time is also often related to money, which managers only partially control, which adds an additional layer of complexity. The most important change that can be made with respect to time as a barrier is the transition of job satisfaction from an important issue to an issue that has a time-defined priority in the organization as a whole. One problem with this, is that job satisfaction is never technically 'solved'. It is an ongoing process that needs to be re-evaluated and re-calculated constantly depending on the needs of the staff and the department. One manager stated that the problem with undefined issues is that *"when everything is a priority, nothing is a priority"* (Participant 9KGI). By time-stamping job satisfaction measurement, intervention implementation, and re-evaluation, this has the potential to move the issue from the sidelines to the playing field. This change of priority, however, cannot be done without acknowledging the required investment of time and money by managers. Organizational leaders must understand that although it will require investing money initially, the return of investment will come in the long run when job satisfaction improves, which decreases costs required to recruit nurses, to educate ED nurses, and to fill in gaps in schedules, and most importantly will be increase patient safety. Additionally, in order to allow managers time to concentrate on job satisfaction, the other barriers of time need to be addressed. These depend on the size of the hospital.

For smaller and more isolated hospital managers that spend a large amount of their time on recruitment, they might benefit from investing in an external recruiting firm or agency. Although such an approach requires an initial investment, this could increase efficiency in the department, free up the manager to spend time in the department and improve the work

environment, and it could save money in the long run when nurses are retained and less money needs to be spend on recruiting and training. Another area where smaller hospitals could save time would be to collaborate with bigger hospitals when writing policies and procedures in order to improve work environments. One manager reported saving a large amount of time by using another hospital's Narcan distribution protocol as a template. Using another facility's protocol additionally opened up communication channels between managers and created a platform where they could exchange ideas and promote knowledge sharing regarding interventions that have worked in their department. It would be necessary for managers to adapt procedures to the unique needs of their organization but having a framework to build from is helpful.

For larger and more populated areas who have a larger number of nursing staff to oversee, they might benefit from appointing an employee (can be part time) to specifically focus on issues involving work environment, staffing, and job satisfaction. This might seem like a large up-front investment but looking at the amount of money spent on training new nurses, there clearly needs to be more investment in retention strategies, and ED managers cannot under the current model invest adequate time in creating appropriate interventions to address these issues. One manager described their experience with such a dedicated position in their department, and although no formal data had been collected at the time of the interview, they reported this to be an immense help in enhancing work environments and increasing satisfaction of staff.

In larger centres another barrier related to the large number of staff included time required to implement interventions related to differences in needs from the different generations of nurses. Managers reported issues of resiliency and coping mechanisms in newer nurses, and resistance to change in older nurses. One option for improving resiliency and coping would be to mandate nursing programs to address these new and emerging issues in their curriculum. Nursing

curriculums need to adapt to the changing generations of nurses and also the changing needs of the hospitals they will work in. Providing resiliency training in nursing education could increase the ability of new grads to cope with the changing patient environment.

Larger centres also need to figure out how to streamline their decision-making and approval procedures and create more efficient ways to implement interventions related to the ED work environment. If an intervention takes multiple years to pass the many levels of bureaucracy until it can be implemented, chances are that the needs of the department have already changed, and the implementation may only result in a waste of time and money. Efficiency in measurement and implementation are essential from a practical viewpoint.

Overcoming a lack of tools. It is clear that organizations are placing a high value of staff satisfaction, and they understand how this influences staff retention. The value of job satisfaction is reflected in the fact that every organization implements some form of staff satisfaction survey every few years. However, the lack of action that has been reported by managers in response to these surveys indicates the need to increase the usability of this tool in practice. If organizations constantly ask staff what they feel the issues in the department are but then fail to do anything about it, this has the potential to produce worse outcomes than if the survey were not implemented at all. If these surveys are to be a useful tool, they need to be changed to reflect the needs of the managers.

In order to promote practical changes in the department, managers stated they need these surveys to be more ED-specific, they must include more open-ended questions for issues to be discussed, questions need to be focused on the needs of that department, and also allow for the expression of needs of different generations of nurses. The point of these surveys should not be to see what the levels of job satisfaction are, which is largely useless to managers, they should be

a way to explore where improvements could be made and why these are the areas that need to be addressed. These surveys have so much potential, and it is a waste to deny managers of their potential.

It is essential that if an external organization is implementing a satisfaction survey or making changes in any department that they are extremely transparent about their decision-making process, their progress, and their plan, every step of the way. It is likely that without strong involvement of ED leadership and staff, that unintended consequences will occur, possibly negating the positive intent of the project itself.

Transparency and staff involvement are also essential when ED leadership implements interventions in their own department. They must make the process transparent and involve staff in the process, wherever possible. Getting staff involved increases the potential of producing real and useable change because it is based in their reality. However, as many managers voiced, interventions should not solely be based on staff feedback as the perspective of the organization and ED leadership should also be taken into account due to their ability to see the system as a whole. One manager reported using the results of the survey to introduce changes to the department by allowing staff to choose a few topics that needed improvement and combine this with the topics chosen by ED leadership and the organization. This balances staff and organizational perspectives and increases chances for practical change to occur.

In smaller departments, organizations and leaders need to be aware of the bias that could be introduced by smaller numbers of staff. The results of the surveys should be less focused on quantitative results and more focused on the dialogue surveys can create from qualitative data. This type of dialogue would be more helpful in reflecting the reality of the nurses, as statistical

analysis on small sample sizes can produce biased results and result in inadequate translation into practice.

One of the most demanded tools from managers includes a concrete list of evidence-based interventions that they refer to. There is a clear need for the academic world to produce these results, however, academic research often takes years to conduct, publish, and translate into practice. The acuity of this issue cannot be underestimated, and there might not be time to wait until research can produce these results. Managers often asked the principal researcher what other managers were doing, what the situation was in other departments, and if they had similar issues or any novel ideas. As of right now there is no practice community where managers of EDs can communicate with each other to share this valuable information. Managers may benefit from having a communication platform where ED leaders can share ideas and give recommendations to each other. Managers are clearly experiencing similarities in their challenges in overcoming barriers to increasing job satisfaction, and issues are different based on size of the hospital and the community they are based in. Sharing their practical experiences on this type of platform may increase the translation of knowledge into practice and result in more timely changes to our EDs.

Bias and Limitations

There is a risk of selection bias in the participants who took part in this study. The managers who did not call back, who had to reschedule multiple time, and those that could not commit to the 60-minute interview may have had even more stressors than the managers who did agree to participate, which could influence the results of this study. A large portion (n=7) of managers that participated in this study had a tenure of less than 5 years in an ED management position. The enthusiasm and interest shown towards the topic was not exclusive to the shorter

tenured managers, however, due to the smaller sample size, the influence of tenure was unable to be controlled for during statistical analysis. Future research would be necessary with a larger number of participants to conclude that length of tenure is definitively not correlated with results. Results from this study should not be generalized across Canada, as participants were only selected from one province and other areas may experience different barriers due to differences in provincial healthcare systems. Reflexive and methodological journals as well as a clear audit trail minimized researcher bias in this study.

Conclusions

A lack of control, a lack of time, and a lack of tools are three main barriers that have been identified as practical barriers influencing the ability of ED managers to implement interventions addressing job satisfaction of emergency nurses. It is clear that these three barriers act independently and synergistically to impede the ability of an ED manager to increase job satisfaction, which negatively impacts nursing retention and turnover rates in the emergency department. The difference in barriers faced by the managers of varying sizes of hospitals needs to be taken into consideration when addressing job satisfaction, and studies such as this one that are based in practice are necessary in order to ensure implementation of interventions that lead to sustainable change.

Although it is clear that managers and administrators have a high level of knowledge and see the issue of job satisfaction as important, there needs to be an investment from all levels of stakeholders in to translate this knowledge into practice. Nursing schools need to update their curricula to reflect the changes in realities faced by new nurses and prepare nurses for extended scope of practice as well as provide resilience training to help new nurses cope with real world stressors. Organization leaders need to redistribute priorities and funds and promote forward-

thinking long-term prevention strategies versus band-aid solutions, which ignore the root of the problem and increase long-term costs for the hospital. Leaders need to advocate for the needs of their EDs and ensure constant communication with staff and the organization administrators regarding the issues that are preventing them from implementing interventions to increase job satisfaction. ED nurses need to take initiative by involving themselves in their work environment, maintaining constant communication with their leaders, and advocating for the needs of their patients. Researchers need to create useable, practical, evidence-based resources addressing job satisfaction that are specific to the ED and that take into consideration the variety of barriers faced by hospitals in different population areas. Only when all stakeholders take action on this issue and invest time, money, and energy, will true practical sustainable change occur to create safer and healthier EDs for patients and nurses in the future.

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Chapter 5. Conclusion

It is clear that when researching a topic rooted in pragmatism, any exclusion criteria parameters that are set by the researcher ultimately influences the study results. In the first manuscript of this thesis, the literature review, the focus was placed on workplace factors influencing job satisfaction that can be manipulated by ED leaders. It is evident in the second manuscript that these workplace factors constitute only a small portion of the factors that are influencing job satisfaction of emergency nurses from a practical standpoint. The second manuscript demonstrated that there is an entire category of barriers that are outside of the control of the manager that influence the ability of leaders to implement job satisfaction interventions. This serves as a reminder of the importance of practical research, as research that is based on a pragmatic paradigm is more likely to reveal a more holistic story, the results of which are more likely to be able to be used to create real change.

The two manuscripts in this thesis were able to provide a greater understanding of the knowledge and use of job satisfaction measurement and job satisfaction interventions in the ED. The second manuscript identified the practical barriers to implementation of interventions intending to increase the job satisfaction of emergency nurses. This research also identified the gaps that exist in our knowledge of job satisfaction of emergency nurses, and identified which stakeholders need to take action in order to address the issue. It is the hope that the manuscripts in this thesis will pave the path for the discovery of new and creative solutions when addressing issues of job satisfaction of emergency nurses, in a time where this issue is in urgent need of a practical solution.

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Appendix A: Letter of Ethics Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (AUREB) has reviewed and approved the research project noted below. The AUREB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and Athabasca University Policy and Procedures.

Ethics File No.: **23236**

Principal Investigator:
Ms. Sabina Staempfli, Graduate Student
Faculty of Health Disciplines\Master of Nursing

Supervisor:
Dr. Kimberley Lamarche (Supervisor)

Project Title:
Barriers to Implementing Interventions to Increase Nursing Job Satisfaction in Emergency Departments

Effective Date: December 18, 2018 **Expiry Date**: December 17, 2019

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date:** December 18, 2018

Donna Clare, Chair
Faculty of Health Disciplines, Departmental Ethics Review Committee

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Athabasca University Research Ethics Board
University Research Services, Research Centre
1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.675.6718

Appendix B: Letter of Information to Participate

Barriers to Implementation
of Nursing Job Satisfaction Interventions
in the Emergency Department

October, 2018

Principal Investigator/Researcher:
Sabina Staempfli, BScN, RN
Master of Nursing Student
Athabasca University
sabinastaempfli@gmail.com
647-864-2251

Supervisor:
Dr. Kimberley Lamarche, RN, NP, DNP
Associate Professor
Athabasca University
lamarche@athabascau.ca
866-271-9341

Dear Reader,

You are invited to take part in a research project. This document outlines the information that you need to know in order to have enough information to make an informed decision of whether or not you wish to participate in this study. It will outline the purpose of the study, the details of your involvement, associated risks and benefits, details regarding privacy and confidentiality, and finally, details regarding the dissemination of the research findings. Please read the document carefully and feel free to contact either of the above persons with further questions. If you choose not to take part or to withdraw at any point in time in the study, there will be no negative consequences to you now or in the future. If you do choose to take part, please sign the Document of Informed Consent that follows this document and send it back to the principal investigator.

Thank you for your consideration.

Sincerely,

Sabina Staempfli

Introduction

My name is Sabina Staempfli, and I am a Master of Nursing student at Athabasca University (AU). As a requirement to complete my degree, I am conducting a research project investigating the barriers that exist that prevent the implementation of interventions that increase job satisfaction of emergency department (ED) nurses. I am conducting this project under the supervision of Dr. Kimberley Lamarche.

Why are you being asked to take part in this research project?

You are being invited to participate in this project because you are an ED manager and have the knowledge and experience necessary to address questions regarding barriers to implementation of interventions that are intended to increase job satisfaction of nurses in the ED.

What is the purpose of this research project?

The purpose of this research project is to identify the barriers that prevent the implementation of interventions that increase job satisfaction of ED nurses. The objectives will be to determine the current level of knowledge of nursing job satisfaction measurement and impact, the perception of the level of importance of job satisfaction measurement and implementation of intervention strategies, the perceived barriers from the ED management perspective that prevents the implementation of interventions intending to increase job satisfaction, and finally, the potential facilitators that would improve ability of managers to create interventions to increase job satisfaction of their nursing staff.

What will you be asked to do?

Your participation in this project will involve a Skype interview with me (the primary investigator) that will last approximately 60 minutes. The interview (both audio and video) will be recorded and transcribed. The interview will take place between January and March of 2018 and will occur at a time of your choice. The interview will begin by reviewing this letter of intent followed by you filling out a consent form if you have not already done so, if you choose to participate in this study. Next you will be asked to complete a short questionnaire which you can choose to complete before or at the beginning of the interview. Next, I will ask you a series of questions regarding nursing job satisfaction. After the interview you will have a chance to review the transcript for errors, omissions, and to make sure that I have been able to capture what you intended to say. If you have further questions, or if the document requires the addition of information, you may do so at that time, following which you will then return the transcript to me via email within one week.

What are the risks and benefits?

I do not anticipate that you will face any risks while participating in this study. The findings from the study will not directly benefit you, but rather they will inform the greater body of knowledge regarding job satisfaction of ED nurses. AU will benefit from the research thesis being added to its digital collection. The findings of this study hope to inform organizations as well as scholars regarding how to facilitate ED managers in implementing interventions that could increase job satisfaction of their nursing staff.

Do you have to take part?

Your involvement in this study is entirely voluntary. You may stop and end your participation at any point in time *up until data analyses commence*, and all the information you provided to this study will be destroyed if you choose so. Once data analysis has commenced, you may no longer withdraw, and the information gathered in the interview will be used to inform the study. Data analysis will commence one week after the interview transcript has been sent to you. When you are sent the transcript of the interview, there will be a reminder that data analyses will commence in one week. If you feel as though the transcript needs alterations or deletions, you may do so at this time. If you do not return the transcript via email in one week, I will conclude that you are agreeable to the content and will proceed with analysis.

How will your privacy and confidentiality be protected?

The information that you provide will be kept confidential. You will be assigned a participant number and no identifying information will be attached to any of your answers, only

this assigned number. The list that contains your identifying information and assigned number will be kept in a separate secure location. Interview recordings will be password protected and stored on my password protected computer. The Skype account newly created and used to conduct the interviews will be deleted after all the interviews are completed along with all of your identifying information. Transcripts and other paper items will be stored in a locked filing cabinet. Only myself (primary investigator) and my advisor (Dr. Lamarche) will have access to this information. All original transcripts will be destroyed after five years.

How will the results of the study be disseminated?

Once data has been collected and analyzed, the results of this study may be disseminated within the AU community either online or in presentation, as well as in the broader international academic community either in written journal format or in presentation format. Only grouped data will be reported, but individual responses may be presented in quotation format along with other responses, but will contain no identifying information. Once the entirety of the Master of Nursing research project is completed, AU will store the results at the AU Library's Digital Thesis and Project Room.

Who can you contact for more information?

Thank you for considering this invitation. If you have any questions or would like more information, please contact me, Sabina Staempfli (the principal investigator) at sabinastaempfli@gmail.com or my supervisor, Dr. Kimberley Lamarche at lamarche@athabascau.ca.

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this project, please contact the Research Ethics Office by e-mail at rebsec@athabascau.ca or by telephone at 1-800-788-9041, ext. 6718

Appendix C: Letter of Informed Consent

Barriers to Implementation
of Nursing Job Satisfaction Interventions
in the Emergency Department

CONSENT

I have read the Invitation to Participate pertaining to this research project, and all my questions have been answered to my satisfaction. I will keep a copy of this letter for my records.

My signature below confirms that

- I understand the research project and the requirements of my participation in this study.
- I understand that this is a voluntary participation and that I am free to withdraw my participation in the research project without having to give a reason up to beginning of data analyses, and that doing so will not affect me now, or in the future.
- I understand that the interview between myself and the researcher will be recorded, both audio and video.
- I understand that if I choose to withdraw after data analysis has begun, my data cannot be removed from the project.
- I am aware that I may contact the researcher or the AU Office of Ethics Research, if I have any questions, concerns, or complaints about any aspect of this research.

Name: _____

Date: _____

Signature: _____

By initialing the statement(s) below:

____ I am granting permission of the researcher to record our Skype conversation.

____ I acknowledge that the researcher may use specific quotations of mine provided they do not identify me.

____ I acknowledge after the interview I will have a chance to review the transcript for clarification, errors, or omissions, and return it to the researcher within one week. If I do not return (via email) the transcript within one week, the researcher can conclude that I am agreeable to the content.

Email address:

_____

Appendix D: Participant Survey

Barriers to Implementation
of Nursing Job Satisfaction Interventions
in the Emergency Department

Manager Survey on Nursing Job Satisfaction in the Emergency Department

This survey consists of demographic and multiple choice questions. It should take between 5-7 minutes to complete. **Thank you** for taking the time to fill out this short survey before we complete our interview. The expertise that you have developed in your field is an important voice to be heard in research, and it is vital that voices like yours are heard if we want to the develop real, useable research. **Please note that you may not save and continue later,** so please make sure you have the time now to complete the survey. There are 11 questions in this survey

Demographics

1 [identifier]Please type in the unique identifier given to you by the principal investigator * Please write your answer here:
2 [age]Please indicate your age: * Please choose **only one** of the following:

- ○ Less than 30 years
- ○ 31-40 years
- ○ 41-50 years
- ○ 51-60 years
- ○ More than 60 years

3 [gender]Please indicate your gender * Please choose **only one** of the following:

- ○ Female
- ○ Male
- ○ Other
- ○ Prefer not to disclose

4 [background]Please indicate your healthcare background: * Please choose **only one** of the following:

- ○ Nursing
- ○ Physiotherapy
- ○ Occupational Therapy
- ○ Medical Doctor
- ○ Other (please write in comment field)

Make a comment on your choice here:
5 [experience]Indicate the number of years that you have held a managerial position at any emergency department * Please choose **only one** of the following:

- ○ 1-5 years

- ○ 6-10 years
- ○ 11-15 years
- ○ 16-20 years
- ○ 21-25 years
- ○ Greater than 25 years

Make a comment on your choice here:

Part 1

6 [infojs]Indicate to which degree that you either agree or disagree with each statement. * Please choose the appropriate response for each item:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I believe that nursing job satisfaction affects patient safety	○	○	○	○	○
I believe that job satisfaction influences nursing staff turnover	○	○	○	○	○
I believe that job satisfaction influences nursing staff absenteeism	○	○	○	○	○
I believe that nursing job satisfaction influences the health of nurses	○	○	○	○	○

7 [infomeasurement] Indicate to which degree that you either agree or disagree with each statement. * PLEASE READ CAREFULLY* as the order of answers has changed slightly from the last question. * Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I believe that tools exist that can measure job satisfaction of nurses	○	○	○	○	○
I believe that tools exist that measure nursing job satisfaction accurately	○	○	○	○	○
I believe that cost effective tools exist that measure job satisfaction of nurses	○	○	○	○	○

8 [infointervention] Indicate to which degree that you either agree or disagree with each statement.* PLEASE READ CAREFULLY* as the order of answers has changed slightly from the last question. * Please choose the appropriate response for each item:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I believe that there exist interventions that can increase job satisfaction of nursing staff	○	○	○	○	○
I believe that there exist cost effective interventions that increase the job satisfaction of nursing staff	○	○	○	○	○

Part 2

9 [importance] Indicate to which degree that you either agree or disagree with each statement. * PLEASE READ CAREFULLY* as the order of answers has changed slightly from the last question. * Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I believe that nursing job satisfaction is an important issue to address in emergency departments	○	○	○	○	○
I believe that measuring job satisfaction of nurses is important in the emergency department	○	○	○	○	○
I believe that implementing interventions that influence job satisfaction of emergency nurses is important	○	○	○	○	○
I believe that the healthcare organization I work for believes nursing job satisfaction to be an important issue in the emergency department	○	○	○	○	○

Part 3

10 [importance] Please choose the level of importance of each of the following issues on a scale of 1 to 10. 1 = no importance and the issue does not warrant any attention. 10 = the highest level of importance and needs to be addressed immediately * Please choose the appropriate response for each item:

	1	2	3	4	5	6	7	8	9	10
the level of importance that the issue of job satisfaction in emergency nurses has to you	○	○	○	○	○	○	○	○	○	○
the level of importance that measuring job satisfaction has to you	○	○	○	○	○	○	○	○	○	○
the level of importance that developing interventions influencing nursing job satisfaction has to you	○	○	○	○	○	○	○	○	○	○
the level of importance that the issue of job satisfaction has to your organization	○	○	○	○	○	○	○	○	○	○

Note that there will be an opportunity to write comments in the following section.

Part 4 11 [comments] Write any additional comments or questions here. Please also feel free to bring up any concerns, comments, or questions with the principal investigator during the interview. Please press submit to complete the survey.
Please write your answer here: Thank you so much for taking the time to complete the survey. Please contact me either by email or phone if you have any comments, concerns or questions. I look forward to speaking with you soon during our interview. Sincerely, Sabina Staempfli [contact information]

Appendix E: Interview Questions

Introductory Statement: To start us off, I will tell you a little bit about myself, my background, and my impetus for this research study so that you know a little bit about me and where I'm coming from. I work as an RN in an emergency department in Toronto on a casual basis and also as a travel nurse in emergency departments across the country. Through my travel nursing experience, I realized that there was quite a range of levels of job satisfaction and dissatisfaction across hospitals, which got me interested in learning more about this topic. After thoroughly combing the job satisfaction literature that exists, I realized that we had a lot of academic information regarding the job satisfaction of nurses, but almost no practical information, and even less information specific to emergency departments. The purpose of this research is therefore to ask the experts, such as yourself, to help me develop a practical understanding of job satisfaction in emergency departments, so that we can come up with ways to get this knowledge translated into practice. I want to know specifically about your experience in implementing interventions to influence job satisfaction, what the barriers are to implementing them, and what we can and could do in the future to overcome them.

Questions are semi-structured: everyone will be asked the same basic questions but follow-up questions or prompts will be different for each participant.

1. Why don't we start by discussing the survey you have completed. How did you feel filling out the survey? Was there any question that you would like to discuss or comment on?

2. Tell me a story about an experience that you have had as a manager in the emergency department with the topic of nursing job satisfaction. How does this make you feel? Did you feel supported in your position as a manager during this experience?

3. For the next question, I will present a small hypothetical scenario. This is not based on any real numbers, it is purely a thought experiment. I would like you to pretend that you are speaking with your boss, or someone higher up in the hospital organization. The hospital has hired an external organization to measure job satisfaction of nursing staff and they found that the levels of nursing job satisfaction across the hospital were below national average. They are asking you to address the issue in your department by developing and implementing an intervention (or interventions) that will increase the job satisfaction of your nursing staff to get nursing job satisfaction levels up and over the national average. How would you respond to this request? What would you tell them is specifically preventing you from implementing interventions that increase job satisfaction of nursing staff? What would you ask for, specifically, in order to facilitate your ability to create and implement these interventions? What would be some examples of interventions that you might implement?

4. The next question continues with this hypothetical scenario, but there is an added clause. This time the hospital has requested you to not only to implement the interventions to increase satisfaction levels but also requires you to conduct a follow up measurement of job satisfaction levels of the nursing staff working in your department. How would you respond to *this* request? What would you tell them is preventing you from measuring job

satisfaction of the emergency nurses? What would you ask for, in order to facilitate your ability to conduct this measurement? What are some examples of measuring tools that you could use?

5. What direction you would like to see nursing job satisfaction research heading? Name one thing that you hope will be produced by job satisfaction research that would be the most beneficial to you in your practice?

6. Would you like to add anything else? Do you have any questions for me?

Conclusion Statement: Thank you for taking the time to speak with me today. This interview will be transcribed using a secure online transcription service or manually by myself. Upon completion of transcription, you will have a chance to review it for clarification, errors, or omissions and return it to myself within one week of receiving it via email. If I do not email me the transcript within one week, I will conclude that you are agreeable with the content and I will commence with data analysis. At this point in time you will no longer be able to withdraw your data contributions from the study. Would you like to be sent the final results of the study? Any last questions/concerns.

Appendix F: Six Phases of Thematic Analysis

By Braun and Clarke (2006, p. 87)

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.